Peter Richtárik: Curriculum Vitae

1. CONTACT DETAILS

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2. RESEARCHER IDs

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Web of Science Researcher ID:	O-5797-2018

3. RESEARCH INTERESTS

◇ machine learning, federated learning, empirical risk minimization
◇ big data optimization, convex and non-convex optimization; 0th, 1st, and 2nd order optimization methods
◇ randomized algorithms, randomized coordinate descent, stochastic gradient descent, variance reduction
◇ randomized numerical linear algebra
◇ parallel and distributed computing, supercomputing, gradient compression

4. ACADEMIC POSITIONS

2019–now	**Professor**, Computer Science, King Abdullah University of Science and Technology (KAUST), Kingdom of Saudi Arabia
2022–2023	**Adjunct Professor**[1], Mohamed bin Zayed University of Artificial Intelligence (MBZUAI), Abu Dhabi, United Arab Emirates
2017–2019	**Visiting Professor**, Moscow Institute of Physics and Technology, Russia
2017–2019	**Associate Professor**, Computer Science, KAUST, Kingdom of Saudi Arabia
2016–2019	**Associate Professor (Reader)**, Mathematics, University of Edinburgh
2013	**Invited Visiting Scientist**, Simons Institute for the Theory of Computing, UC Berkeley
2009–2016	**Assistant Professor (Lecturer)**, School of Mathematics, University of Edinburgh
2007–2009	**Postdoctoral Fellow**, Center for Operations Research and Econometrics and Department of Mathematical Engineering, Catholic University of Louvain, Belgium (host: Yu. Nesterov)

5. EDUCATION

2007	**PhD, Operations Research, Cornell University**
2006	MS, Operations Research, Cornell University
2001	Mgr, Mathematics, Comenius University, Slovakia, 100% academic grades, ranked #1
2001	Bc, Management, Comenius University, Slovakia, 100% academic grades, ranked #1
2000	Bc, Mathematics, Comenius University, Slovakia, 100% academic grades, ranked #1

[1]This position allowed me to supervise Dr. Sarit Khirirat – a postdoc located at MBZUAI.

6. AWARDS & RECOGNITIONS

Awards explicitly addressed to my students, postdocs or coauthors for a talk, poster or paper based on joint research with me are listed in the section "8.4 My Team: Awards and Recognitions".

2026 **2023 Charles Broyden Prize**[2] (for paper [94])
2025 **Spotlight Paper at ICLR 2025** (for paper [244])
2025 **AMA Distinguished Speaker**, The Hong Kong Polytechnic University
2024 **Top 8–14 Author at NeurIPS 2024** in terms of the number of papers accepted to the conference[3]
2024 **2022 Charles Broyden Prize**[4] (for paper [139])
2024 **Oral Paper at NeurIPS 2024** (0.4% acceptance rate[5]; paper [249])
2024 **Spotlight Paper at NeurIPS 2024** (for paper [243])
2024 **Oral Paper at ICML 2024** (1.5% acceptance rate; paper [231])
2023 **#1 in Asia and #3 in Europe in Machine Learning according to CSRankings.org**[6]
2023 Research.com Computer Science in Saudi Arabia Leader Award
2023 Research.com Mathematics in Saudi Arabia Leader Award
2023 **Oral Paper at ICLR 2023** (for paper [184])
2022 **Top 10–14 Author at NeurIPS 2022** in terms of the number of papers accepted to the conference[7]
2022 Research.com Rising Star of Science[8], global rank 214 among all fields of science
2022 **Spotlight Paper at ICLR 2022** (for paper [156])
2021 **Oral Paper at NeurIPS 2021** (less than 1% acceptance rate; paper [167])
2021 **2020 COAP Best Paper Award**[9] (for paper [65])
2021 **One of the 10 Most Cited Articles Published in SIMAX Since 2019**[10] for paper [56]
2020 **Best Paper Award at the NeurIPS 2020 Workshop on Scalability, Privacy, and Security in Federated Learning** for paper [135]
2020 **Top 30–50 author at ICML 2020** (in number of papers accepted)
2020 1st Most Downloaded Paper in "SIAM J. on Matrix Analysis and Applications" for paper [39]
2020 3rd Most Downloaded Paper in "SIAM J. on Matrix Analysis and Applications" for paper [44]
2020 3rd Most Downloaded Paper in "SIAM J. on Optimization" for paper [57]
2020 4th Most Downloaded Paper in "SIAM J. on Optimization" for paper [21]
2019 1st Most Downloaded Paper in "SIAM J. on Matrix Analysis and Applications" for paper [39]
2019 4th Most Downloaded Paper in "SIAM J. on Optimization" for paper [57]
2019 5th Most Downloaded Paper in "SIAM J. on Optimization" for paper [21]
2019 10th Most Downloaded Paper in "SIAM J. on Matrix Analysis and Applications" for paper [44]
2019 **Interviewed by Robin.ly for their "Leaders in AI" platform at NeurIPS 2019**[11]

[2] The prize was announced in 2026.

[3] https://papercopilot.com/paper-list/neurips-paper-list/neurips-2024-paper-list/

[4] The prize was announced in 2024.

[5] 61 papers out of more than 15,000.

[6] As all rankings, these rankings have to be taken with a huge grain of salt. According to CS Rankings in the 5 year period 2019–2023, I rank #1 in Machine Learning in all of Asia: 1) Peter Richtárik at KAUST (14), 2) Sung Ju Hwang at KAIST (13.6), 3) Jinwoo Shin at KAIST (13.2), 4) Jun Zhu at Tsinghua (12.3), 5) Masashi Sugiyama at Tokyo (12), 6) Junchi Yan at Shanghai Jiao Tong (10.4) 7) Taiji Suzuki at Tokyo (9.6), 8) Kun Zhang at MBZUAI (9.3). If KAUST was in Europe, I would rank #3 in Europe in the same metric: 1) Andreas Krause at ETH (17.5), 2) Bernhard Schölkopf at Max Planck (14.9), 3) Peter Richtárik at KAUST (14), 4) Volkan Cevher at EPFL (12.5), 5) Max Welling at Amsterdam (12.2), 6) Stephan Günnemann at TU Munich (12.1), 7) Yishay Mansour at Tel Aviv (9.6), 8) Shie Mannor at Technion (9.3), 9) Francis Bach at ENS (9.2), 10) Shimon Whiteson at Oxford (8.9), 11) José Miguel Hernández-Lobato at Cambridge (8.8).

[7] https://papercopilot.com/paper-list/neurips-paper-list/neurips-2022-paper-list/ (my team had 12 papers accepted; I was a coauthor on 9)

[8] https://research.com/u/peter-richtarik

[9] For the best paper published in Computational Optimization and Applications in 2020.

[10] https://sinews.siam.org/Details-Page/10-most-highly-cited-articles-from-simax-since-2019-1

[11] From Robin.ly LinkedIn Post: "We are interviewing the world's leading AI academics this week at NeurIPS2019. Look forward to sharing much more on the state of AI research, how it's fueling AI commercialization & what we can expect from AI

2019	**Best NeurIPS Reviewer Award**[12]
2019	**Distinguished Speaker Award,** Int. Conf. on Continuous Optimization, Berlin, Germany
2018	**Best NeurIPS Reviewer Award**[13]
2018	2nd Most Downloaded Paper in "SIAM J. on Matrix Analysis and Applications" for paper [39]
2018	6th Most Downloaded Paper in "SIAM J. on Matrix Analysis and Applications" for paper [44]
2017	1st Most Read Paper in "Optimization Methods and Software" for paper [41]
2017	1st Most Downloaded Paper in "SIAM J. on Matrix Analysis and Applications" for paper [39]
2017	1st Most Trending Paper in "Mathematical Programming" for paper [10]
2017	**Announcement of "Federated Learning"** by Google (based on papers [51, 52])
2016–2017	2nd Most Downloaded Paper in "SIAM J. on Optimization" for paper [21]
2016	**SIAM SIGEST Outstanding Paper Award** for paper [21]
2016	**EUSA Best Research or Dissertation Supervisor Award**[14] (2nd Prize)
2016–now	**Turing Fellow, The Alan Turing Institute**, London
2016	**EPSRC Fellowship in Mathematical Sciences**[15]
2014	Nominated for the **Chancellor's Rising Star Award**[16], University of Edinburgh
2013	**Simons Institute Visiting Scientist Fellowship**, UC Berkeley
2013	Nominated for the **2014 Microsoft Research Faculty Fellowship**[17]
2011 & 2012	Nominated for the **Innovative Teaching Award**, University of Edinburgh
2011–2017	**Honorary Fellow**, Heriot-Watt University
2007	**CORE Fellowship**, Université catholique de Louvain
2002	**Cornell University Graduate Fellowship**
2001	**Dean's Prize and Rector's Prize**, Comenius University
1992–2001	Winner of Numerous Mathematical Olympiads and Competitions

7. GRANTS

7.1 MY GRANTS[18]

2026–2028	**$410,413 (PI)**, Industrial Research Grant from Saudi company Tahakom, "Optimizing LLM Efficiency through Precision and Parameter Reduction", Joint with: Marco Canini (KAUST, PI) and Suhaib Fahmy (KAUST, PI)
2026–2027	**$100,000 (PI)**, KAUST Small Translational Grant (sTRG), "TRACE: Transforming Textbooks into Verified, Interactive Courses using Retrieval-Augmented Generation", Joint with: Laurent Condat (research scientist), Ivan Ilin (PhD student)
2026–2027	**$650,000 (PI)**, KAUST Baseline Research Grant[19]
2025–2027	**$100,000**, Google PhD Fellowship in Algorithms & Optimization for Kaja Gruntkowska[20]
2025–2028	**$675,000 (PI)**, Competitive Research Grant (CRG)
2025–2028	**1,600,000 SAR (PI)**, RDIA Baseload Applied Grant (BAG)
2025–2026	**$650,000 (PI)**, KAUST Baseline Research Grant

in the next decade. Spotlight interviews with Yoshua Bengio, Peter Richtárik, Charles Onu, Max Welling, Shimon Whiteson, Sharon Zhou, Liwei Wang, Song Han & many more. "

[12] "Thank you for all your hard work reviewing for NeurIPS 2019! We are delighted to inform you that you were one of the 400 highest-scoring reviewers this year! You will therefore be given access (for a limited period of time) to one free registration to this year's conference; you will later receive additional information by email explaining how to access your registration. "

[13] "We are delighted to inform you that you were one of the 218 highest-scoring reviewers this year! You will therefore be given access (for a limited period of time) to one free registration to this year's conference."

[14] EUSA = Edinburgh University Students' Association. One first and one second prize are given each year across all disciplines and levels of seniority at the University of Edinburgh.

[15] In total, 5 fellowships in mathematics were awarded in the UK in this round at all levels of seniority.

[16] One of two nominated from the School of Mathematics.

[17] Selected universities can nominate a single candidate. No European scientists got the award in 2014.

[18] All small grants (value below $10k) are excluded from this list. The total value of the 16 small grants excluded is £42,090. Funding from the VCC and ECRC centers at KAUST is excluded from this list.

[19] Unrestricted basic research funding offered each year to KAUST Professors.

[20] An unrestricted gift of $50,000 per year for two years

2024–2029 **$11,000,000 (Co-PI)**, KAUST Center of Excellence for Generative AI

2024–2025 **$650,000 (PI)**, KAUST Baseline Research Grant

2024 **1,000,000 SAR (PI)**, SDAIA-KAUST Center of Excellence in Data Science and Artificial Intelligence

2023–2024 **$60,000 (PI)**, SDAIA-KAUST Center of Excellence in Data Science and Artificial Intelligence

2023–2024 **$650,000 (PI)**, KAUST Baseline Research Grant

2022–2023 **$60,000 (PI)**, SDAIA-KAUST Center of Excellence in Data Science and Artificial Intelligence

2022–2023 **$40,000 (PI)**, Top-up to KAUST Baseline Research Grant

2022–2023 **$540,000 (PI)**, KAUST Baseline Research Grant

2021–2022 **$540,000 (PI)**, KAUST Baseline Research Grant

2021–2022 **$100,000 (PI)**, AI Initiative Funding

2020–2021 **$540,000 (PI)**, KAUST Baseline Research Grant

2020 **$100,000 (PI)**, AI Initiative Seed Funding, "Algorithmic, Systems and Privacy Aspects of Split Learning", Joint with: Marco Canini (KAUST, Co-I) and Panos Kalnis (KAUST, Co-I)

2019–2020 **$200,000 (PI)**, Extreme Computing Research Center (ECRC) funding, KAUST, "Optimization for Machine Learning", Joint with: Tong Zhang (HKUST, PI)

2019–2020 **$540,000 (PI)**, KAUST Baseline Research Grant

2018–2019 **£216,843 (Co-I)**, Innovate UK Grant, "Renewable Energy Performance Score (REPSCORE)", Joint with: Enian (PI), Daniel Friedrich (Edinburgh, PI)

2018–2021 **$974,789 (Co-I)**, CRG2017 Grant, "Analyzing Large Scale 3D Shape Collections", Joint with: Peter Wonka (KAUST, PI), Maks Ovsjanikov (École Polytechnique, Co-I)

2017–2019 **RUB 7,960,000 (PI)**, Visiting Professor Grant, Moscow Institute of Physics and Technology

2018 **$10,000 (PI)**, KICP grant in support of KAUST Research Workshop on Optimization and Big Data, 2018

2018–2019 **$400,000 (PI)**, KAUST Baseline Research Grant[21]

2017–2018 **$79,281 (PI)**, KAUST Office of Sponsored Research Conference Support Grant URF/1/3347-01, "Optimization and Big Data", Joint with: Marco Canini (KAUST, PI)

2016–2020 **£70,000** EPSRC CASE[22] PhD Studentship for Filip Hanzely

2017–2018 **$400,000 (PI)**, KAUST Baseline Research Grant

2016–2017 **$133,333 (PI)**, KAUST Baseline Research Grant (4 months of cover: March-June 2017)

2016–2020 **£45,000 (PI)**, Amazon Research Grant

2016–2020 **£823,211 (PI)**, EPSRC Early Career Fellowship in Mathematical Sciences EP/N005538/1, "Randomized Algorithms for Extreme Convex Optimization"

2016–2020 **$20,000 (PI)**, Amazon EC2 Grant (partner funding associated with the EPSRC Fellowship)

2015 **£20,000 (PI)**, Alan Turing Institute Scoping Workshop Grant, "Distributed Machine Learning and Optimization", Joint with: Artur Czumaj (Warwick, PI), Ilias Diakonikolas (Edinburgh, PI), Mark Girolami (Warwick, PI), Raphael Hauser (Oxford, PI), John Shawe-Taylor (UCL, PI)

2015 **£12,000 (PI)**, Alan Turing Institute Scoping Workshop Grant, "Theoretical and Computational Approaches to Large Scale Inverse Problems", Joint with: Simon Arridge (UCL, PI), John Aston (Cambridge, PI), Carola-Bibiane Schönlieb (Cambridge, PI), Andrew Stuart (Warwick, PI), Jared Tanner (Oxford, PI)

2014–2017 **$180,000**, Google Europe Doctoral Fellowship for Jakub Konečný

2013–2015 **£125,849 (PI)**, EPSRC First Grant EP/K02325X/1, "Accelerated Coordinate Descent Methods for Big Data Optimization"

2014–2015 **£40,000 (PI)**, School of Mathematics Grant, "Accelerated Coordinate Descent Methods for Big Data Optimization", matching funding for my postdoc Z. Qu

2013 **£18,785 (PI)**, NAIS Travel Grant, my 2 students spending semester at Berkeley

2012–2014 **£66,300 (PI)**, NAIS Lecturer Grant, paying for a proportion of my time

2012–2014 **£10,000 (PI)**, NAIS Startup Grant

[21] Unrestricted basic research funding offered each year to KAUST Associate Professors.

[22] CASE = Cooperative Awards in Science and Engineering

2012–2013	**£49,518 (Co-I)**, EPSRC grant EP/J020567/1, "Algorithms for Data Simplicity", Joint with: Jared Tanner (Oxford, PI)
2011–2014	**£646,264 (Co-I)**, EPSRC and RCUK grant EP/I017127/1, "Mathematics for Vast Digital Resources", Joint with: Burak Büke (Edinburgh, Co-I) and Jacek Gondzio (Edinburgh, PI)

7.2 GRANTS I HELPED TO PREPARE[23]

2014–2019	£42 million + £5 million, "The Alan Turing Institute". I am one of a small number of people who helped to prepare Edinburgh's bid.
2014–2023	£4.5 million, EPSRC grant, "Maxwell Institute Graduate School in Mathematical Analysis and Applications", PI: Anthony Carbery (Edinburgh). I am one of the named PhD supervisors on the grant.
2014–2021	£5.03 million, EPSRC grant, "Centre for Doctoral Training in Data Science", PI: Chris Williams (Edinburgh). I am one of 45 named potential PhD advisors at U of Edinburgh.

8. MY TEAM

8.1 MY TEAM @ KAUST

09/2026–now	**Research scientist: Yury Demidovich (continuing after postdoc at KAUST)**
08/2026–now	**MS student: Tigran Melkonyan (from AUA, Armenia)**
07/2026–now	**Research scientist: Xun Qian (from Shanghai, China)**
07/2026–09/2026	Postdoc: Egor Shulgin (continuing after PhD at KAUST)[24]
06/2026–10/2026	Postdoc: Grigory Malinovsky (continuing after PhD at KAUST)[25]
05/2026–now	**Intern: Jan Niklas Kolzenburg (from Frankfurt School of Finance & Management, Germany)**
12/2025–05/2026	Postdoc: Artavazd Maranjyan (from KAUST, Saudi Arabia)[26]
08/2025–now	**MS student: Alina Abdikarimova (from Nazarbayev U, Kazakhstan)**
08/2025–now	**MS student: Alexander Gaponov (from HSE, Russia)**
08/2025–now	**MS student: Zhirayr Tovmasyan (from Yerevan State U, Armenia)**
08/2025–now	**PhD student: Ammar Mahran (from U of Oxford, UK)**
06/2025–now	**PhD student: Yassine Maziane (from University of Liege, Belgium)**
05/2025–08/2025	Intern: Alexander Gaponov (from HSE, Russia)
07/2025–05/2026	Intern: Igor Klimczak (from U of Oxford, UK)
05/2025–09/2025	Intern: Hussein Rammal (from École Polytechnique, France)
04/2025–09/2025	Intern: Adrien Fradin (from École Polytechnique, France)
01/2025–now	**PhD student: Ivan Ilin (from Novosibirsk State University, Russia)**
10/2024–04/2025	Intern: Philip Zmushko (from MIPT, Russia)
09/2024–07/2025	Intern: Zhirayr Tovmasyan (from Yerevan State University, Armenia)
06/2024–11/2024	Intern: Aadi Rane (from UC Berkeley, USA)
05/2024–09/2024	Intern: Wojciech Anyszka (from U of Groningen, Netherlands)
02/2024–05/2026	Postdoc: Sarit Khirirat (from KTH, Sweden)
02/2024–05/2024	Intern: Simone Maria Giancola (from Bocconi, Italy)
01/2024–05/2024	Intern: Dymitr Lubczyk (from Amsterdam, Netherlands)
01/2024–04/2024	Intern: Kirill Acharya (from MIPT, Russia)
01/2024–05/2024	Intern: Robin Yadav (from UBC, Canada)
01/2024–now	**PhD student: Kaja Gruntkowska (from U of Oxford, UK)**
12/2023–03/2024	Intern: Anh-Duc Nguyen (from NUS, Singapore)

[23] Large grants which I helped to prepare but where I am not formally an investigator.
[24] next position: Postdoc, MBZUAI, UAE (since 09/2026)
[25] next position: Postdoc, EPFL, Switzerland (since 11/2026)
[26] next position: Postdoc, EPFL, Switzerland

10/2023–03/2024	Intern: Timur Kharisov (from MIPT, Russia)
10/2023–04/2024	Intern: Georg Meinhardt (from University of Oxford, UK)
09/2023–01/2024	Intern: Marta Pozzi (from Pavia, Italy)
09/2023–02/2024	Intern: Ákos Zahorský (from Eötvös Loránd University, Hungary)
08/2023–05/2025	MS student: Omar Shaikh Omar (from University of Washington, USA)
08/2023–12/2024	MS student: Artem Riabinin (from Lomonosov Moscow State U, Russia)
08/2023–12/2025	PhD student: Artavazd Maranjyan (from Yerevan State U, Armenia; thesis: First Provably Optimal Asynchronous SGD for Homogeneous and Heterogeneous Data, 2025)
07/2023–09/2023	Intern: Andrei Panferov (from MIPT, Russia)
06/2023–08/2023	Intern: Babis Kostopoulos (from U of Athens, Greece)
04/2023–09/2023	Intern: Ahmad Rammal (from École Polytechnique, France)
01/2023–05/2023	Intern: Dinis Seward (from University of Oxford, UK)
01/2023–12/2024	MS student: Ivan Ilin (from Novosibirsk State University, Russia)
01/2023–now	**PhD student: Hanmin Li (from USTC, China)**
09/2022–08/2026	Postdoc: Yury Demidovich (from MIPT, Russia)[27]
09/2022–10/2026	PhD student: Abdurakhmon Sadiev (from MIPT, Russia; thesis: From Imperfect Information to Controlled Steps: Stochastic Optimization under Heavy-Tailed Noise and Compression, 2026)[28]
08/2022–10/2023[29]	MS student: Rafał Szlendak (from Warwick University, UK)
08/2022–02/2023	Intern: Wenzhi "Tom" Fang (from ShanghaiTech University, China)
07/2022–08/2022	Intern: Omar Shaikh Omar (from University of Washington, USA)
07/2022–10/2022	Intern: Michał Grudzień (from Oxford, UK)
06/2022–01/2023	Intern: Artavazd Maranjyan[30] (from Yerevan State University, Armenia)
06/2022–09/2022	Intern: Kaja Gruntkowska (from Warwick, UK)
06/2022–now	**PhD student: Igor Sokolov (continuing after MS at KAUST)**
01/2022–07/2022	Intern: Abdurakhmon Sadiev (from MIPT, Russia)
01/2022–04/2025	PhD student: Kai Yi (from Xi'an Jiaotong University, China; thesis: Strategies for Improving Communication Efficiency in Distributed and Federated Learning: Compression, Local Training, and Personalization, 2025)
01/2022–06/2026	PhD student: Grigory Malinovsky (from MIPT, Russia; thesis: Theoretical Foundations of Communication-Efficient, Robust, and Practical Distributed and Federated Optimization, 2026)[31]
11/2021–06/2024	Postdoc: Avetik Karagulyan (from CREST, France)
11/2021–02/2022	Intern: Navish Kumar (from IIT Kharagpur, India)
09/2021–07/2026	PhD student: Egor Shulgin (continuing after MS at KAUST; thesis: Understanding Practical Optimization in Machine Learning, 2026)
07/2021–11/2021	Intern: Muhammad Harun Khan (from Imperial College, UK)
07/2021–10/2021	Intern: Rafał Szlendak (from Warwick University, UK)
06/2021–06/2024	Postdoc: Alexander Tyurin (from MIPT, Russia)
06/2021–08/2021	Intern: Bokun Wang (from UC Davis, USA)
03/2021–06/2024	PhD student: Lukang Sun (from Nanjing University, China; thesis: Stein Variational Gradient Descent and Consensus-Based Optimization: Towards a Convergence Analysis and Generalization, 2024)
03/2021–08/2021	Intern: Rustem Islamov[32] (from TU Munich, Germany)
03/2021–11/2021	Intern: Ilyas Fatkhullin[33] (from TU Munich, Germany)

[27] next position: Research Scientist, KAUST (since 09/2026)

[28] next position: Postdoc, MBZUAI, UAE (since 11/2026)

[29] Dropped out of MS studies to join a Large Language Model startup in Germany.

[30] I am supervising Arto's MS thesis at Yerevan State University.

[31] next position: Postdoc, KAUST; then Postdoc, EPFL, from Nov 2026

[32] I have supervised Rustem Islamov's BS thesis at MIPT. Rustem is now an MS student at Institut Polytechnique de Paris, France.

[33] I have supervised Ilyas Fatkhullin's MS thesis at TU Munich. Ilyas is now a PhD student at ETH Zürich Switzerland.

01/2021–11/2023	PhD student: Slavomír Hanzely (continuing after MS at KAUST; thesis: Adaptive Optimization Algorithms for Machine Learning, 2023)
09/2020–03/2022	Research scientist: Zhize Li (from Tsinghua University, China)
10/2020–03/2021	Intern: Bokun Wang (from UC Davis, USA)
09/2020–02/2021	Intern: Eduard Gorbunov (from MIPT, Russia)
08/2020–05/2025	PhD student: Konstantin Burlachenko (from Bauman Moscow State Tech U, Russia; thesis: Optimization Methods and Software for Federated Learning, 2025)
08/2020–05/2022	MS student: Igor Sokolov (from MIPT, Russia)
08/2020–12/2021	MS student: Grigory Malinovsky (from MIPT, Russia)
08/2020–09/2020	Intern: Wenlin Chen (from University of Manchester, UK)
06/2020–11/2020	Intern: Rustem Islamov (from MIPT, Russia)
05/2020–06/2020	Intern: Othmane Sebbouh (from École Polytechnique, France)
05/2020–10/2020	Intern: Ahmed Khaled Ragab (from Cairo University, Egypt)
02/2020–12/2020	Research scientist: El Houcine Bergou (from Toulouse, France)
02/2020–08/2021	MS student: Egor Shulgin (from MIPT, Russia)
02/2020–03/2020	Intern: Eduard Gorbunov (from MIPT, Russia)
01/2020–02/2020	Intern: Alexander Rogozin (from MIPT, Russia)
01/2020–02/2020	Intern: Aleksandr Beznosikov (from MIPT, Russia)
01/2020–02/2020	Intern: Grigory Malinovsky (from MIPT, Russia)
01/2020–05/2025	PhD student: Elnur Gasanov (continuing after MS from KAUST; thesis: The Many Faces of Compression: Theory and Practice in Federated Optimization, 2025)
01/2020–09/2022	PhD student: Dmitry Kovalev (continuing after MS from KAUST; thesis: Optimal Algorithms for Affinely Constrained, Distributed, Decentralized, Minimax, and High-Order Optimization Problems, 2022)
11/2019–now	**Research scientist: Laurent Condat (from Grenoble, France)**
10/2019–11/2022	Postdoc: Mher Safaryan (from Yerevan State University, Armenia)
09/2019–08/2020	Postdoc: Zhize Li (from Tsinghua University, China)
08/2019–12/2020	MS student: Alyazeed Basyoni (from Carnegie Mellon University, USA)
08/2019–12/2020	MS student: Slavomír Hanzely (from Comenius University, Slovakia)
06/2019–09/2019	Intern: Ahmed Khaled Ragab (from Cairo University, Egypt)
03/2019–09/2019	Intern: Sélim Chraibi (from Grenoble, France)
02/2019–10/2021	Postdoc: Adil Salim (from Télécom ParisTech, France)
02/2019–03/2019	Intern: Ľudovít Horváth (from Comenius University, Slovakia)
01/2019–02/2019	Intern: Dmitry Kamzolov (from MIPT, Russia)
01/2019–02/2019	Intern: Vladislav Elsukov (from MIPT, Russia)
01/2019–02/2019	Intern: Igor Sokolov (from MIPT, Russia)
01/2019–02/2019	Intern: Egor Shulgin (from MIPT, Russia)
01/2019–02/2019	Intern: Eduard Gorbunov (from MIPT, Russia)
01/2019–03/2022	PhD student: Alibek Sailanbayev (continuing after MS from KAUST)[34]
01/2019–06/2022	PhD student: Samuel Horváth (continuing after MS from KAUST; thesis: Better Methods and Theory for Federated Learning: Compression, Client Selection and Heterogeneity, 2022)
11/2018–11/2021	Postdoc: Xun Qian (from Hong Kong Baptist University, Hong Kong)
09/2018–12/2019	MS student: Elnur Gasanov (from MIPT, Russia)
09/2018–12/2019	MS student: Dmitry Kovalev (from MIPT, Russia)
03/2018–08/2018	Intern: Sarah Sachs[35] (from TU Munich, Germany)
01/2018–02/2018	Intern: Eduard Gorbunov (from MIPT, Russia)
01/2018–02/2018	Intern: Elnur Gasanov (from MIPT, Russia)
01/2018–02/2018	Intern: Dmitry Kovalev[36] (from MIPT, Russia)

[34] Was forced to drop out of PhD due to serious personal/family reasons.
[35] I have supervised Sarah Sachs' MS thesis at TU Munich.
[36] I have supervised Dmitry Kovalev's BS thesis at MIPT.

01/2018–02/2018	Intern: Slavomír Hanzely[37] (from Comenius University, Slovakia)
01/2018–01/2019	Postdoc: El Houcine Bergou (from Institut National Polytechnique, Toulouse, France)
10/2017–11/2017	Intern: Nikita Doikov (from HSE Moscow, Russia)
08/2017–12/2017	PhD student: Viktor Lukáček[38] (from Comenius University, Slovakia)
08/2017–12/2021	PhD student: Konstantin Mishchenko (from ENS, France; thesis: On Seven Fundamental Optimization Challenges in Machine Learning, 2021)
08/2017–11/2020	PhD student: Filip Hanzely (now: Quant, Wincent; thesis: Optimization for Supervised Machine Learning: Randomized Algorithms for Data and Parameters, 2020)
08/2017–12/2018	MS student: Alibek Sailanbayev (from Nazarbayev University, Kazakhstan)
08/2017–12/2018	MS student: Samuel Horváth (from Comenius University, Slovakia)
05/2017–05/2019	Postdoc: Aritra Dutta (from University of Central Florida, USA)
05/2017–07/2017	Intern: Atal Sahu (from IIT Kanpur, India)
05/2017–07/2017	Intern: Aashutosh Tiwari (from IIT Kanpur, India)

8.2 MY TEAM @ Kempelen Institute for Intelligent Technologies (KInIT)

09/2022–10/2023	PhD student: Ivan Agarský (from Comenius University, Slovakia)

8.3 MY TEAM @ Mohammed bin Zayed University of Artificial Intelligence (MBZUAI)

09/2022–08/2023	Postdoc: Sarit Khirirat (from KTH, Sweden)

8.4 MY TEAM @ MOSCOW INSTITUTE OF PHYSICS AND TECHNOLOGY

09/2020–12/2021	PhD student: Eduard Gorbunov (PhD at MIPT, co-advised with Alexander Gasnikov; thesis: Distributed and Stochastic Optimization Methods with Gradient Compression and Local Steps, 2021)
09/2018–10/2019	Dmitry Kamzolov
09/2018–10/2019	Vladislav Elsukov
09/2018–10/2019	Igor Sokolov (now: PhD student in my team at KAUST)
08/2018–10/2019	Egor Shulgin (now: Postdoc at MBZUAI since 09/2026)
10/2017–10/2019	Eduard Gorbunov (now: Assistant Professor of Statistics and Data Science at MBZUAI since 08/2025; previously Postdoc, 09/2022–03/2024, and Research Scientist, 04/2024–07/2025, at MBZUAI)
10/2017–08/2018	Dmitry Kovalev (now: Postdoc at Université catholique de Louvain)
10/2017–08/2018	Elnur Gasanov (now: PhD student in my team at KAUST)

8.5 MY TEAM @ UNIVERSITY OF EDINBURGH

09/2016–07/2017	PhD student: Filip Hanzely (transferred to KAUST after 1 year in Edinburgh to follow me, with an MS degree with distinction)
03/2016–07/2016	Postdoc: Robert M. Gower
10/2015–06/2019	PhD student: Nicolas Loizou (now: Postdoc, MILA, Montréal; thesis: Randomized Iterative Methods for Linear Systems: Momentum, Inexactness and Gossip, 2019)
10/2015–02/2017	PhD student: Theo Pavlakou (now: Google; 2nd advisor; main advisor: Iain Murray)
03/2015–03/2016	PhD student: Robert M. Gower (now: Assistant Prof. at Télécom ParisTech; thesis: Sketch and Project: Randomized Iterative Methods for Linear Systems and Inverting Matrices, 2016)

[37] I have supervised Slavomír Hanzely's BS thesis at Comenius University.

[38] Viktor Lukáček left after spending 1 semester at KAUST as he realized PhD was not the right path for him.

03/2015–06/2015	Visiting PhD student: Luca Bravi (from University of Florence)
10/2014–03/2015	Postdoc: Ademir Ribeiro (now: Associate Prof. at University of Paraná)
09/2014–11/2017	PhD student: Dominik Csiba (now: Algo Lead at Nozdormu, Slovakia; thesis: Data Sampling Strategies in Stochastic Algorithms for Empirical Risk Minimization, 2017)
08/2013–07/2017	PhD student: Jakub Konečný (now: Research Scientist, Google; thesis: Stochastic, Distributed and Federated Optimization for Machine Learning, 2017)
12/2013–08/2015	Postdoc: Zheng Qu (now: Assistant Prof. at University of Hong Kong)
09/2012–02/2013	Visiting PhD student: Minnan Luo (now: Associate Prof. at Xi'an Jiaotong University)
10/2012–07/2014	Postdoc: Olivier Fercoq (now: Assistant Prof. at Télécom ParisTech)
02/2012–07/2014	Postdoc: Rachael Tappenden (now: Assistant Prof. at University of Canterbury)
01/2012–06/2012	Postdoc: Jakub Mareček (now: IBM Research, Dublin)
09/2010–03/2014	PhD student: Martin Takáč (now: Associate Prof. at Mohammed bin Zayed University of Artificial Intelligence, UAE; thesis: Randomized Coordinate Descent Methods for Big Data Optimization, 2014)
2010–2015	Supervised 20 MSc Dissertations
2010–2015	Supervised 7 undergraduate students supported by research scholarships (EPSRC, Nuffield, College, . . .)

8.6 MY TEAM: AWARDS, RECOGNITIONS & NOTABLE ACHIEVEMENTS[39]

2026 (Mahran)	Dean's List[40], Applied Mathematics and Computational Science, KAUST
2026 (Malinovsky)	Dean's List, Applied Mathematics and Computational Science, KAUST
2026 (Shulgin)	Dean's List, Applied Mathematics and Computational Science, KAUST
2026 (Gruntkowska)	Dean's List, Statistics, KAUST
2026 (Sadiev)	Dean's List, Computer Science, KAUST
2026 (Li)	Dean's List, Computer Science, KAUST
2026 (Sokolov)	**ICLR 2026 Notable Reviewer**
2026 (Sokolov)	**ICML 2026 Gold Reviewer**
2026 (Maranjyan[41])	**NeurIPS 2026 Top Reviewer**
2026 (Malinovsky)	Best Paper Award (runner-up), International Conference on Computational Optimization, Abu Dhabi, UAE (for paper [245])
2025 (Malinovsky)	**NeurIPS 2025 Top Reviewer**
2025 (Malinovsky)	**ICML 2025 Best Reviewer**
2025 (Condat)	**AISTATS 2025 Best Reviewer**
2025 (Shulgin)	**TMLR Expert Reviewer**
2025 (Condat)	Senior Area Editor, IEEE Transactions on Signal Processing
2025 (Fradin)	Research Internship Prize, École Polytechnique
2025 (Sadiev)	**2 papers accepted at NeurIPS 2025**
2025 (Gruntkowska)	**Google PhD Fellowship in Algorithms and Optimization[42] – first[43] in GCC**
2025 (Malinovsky)	**ICLR 2025 Notable Reviewer**
2025 (Mahran)	Dean's Award (Computer Science)[44], KAUST
2025 (Malinovsky)	Dean's List[45], Applied Mathematics and Computational Science, KAUST
2025 (Sokolov)	Dean's List, Applied Mathematics and Computational Science, KAUST
2025 (Gruntkowska)	Dean's List, Statistics, KAUST
2025 (Burlachenko)	Dean's List, Computer Science, KAUST

[39] All travel grant awards are excluded.
[40] Carries a 2,500 USD cash prize.
[41] Former postdoc.
[42] 100,000 USD unrestricted gift to fund Kaja's PhD for 2 years.
[43] Three more were awarded to students in the UAE in 2025.
[44] A financial add-on to the KAUST Fellowship, worth 6,000 USD annually, given to a few best incoming students by the Dean.
[45] Carries a 2,500 USD cash prize.

2025 (Maranjyan)	Dean's List, Computer Science, KAUST
2025 (Shulgin)	Dean's List, Computer Science, KAUST
2025 (Burlachenko)	Accepts a Quantitative Research Scientist position at Abu Dhabi Investment Authority (ADIA), Abu Dhabi, UAE
2025 (Gasanov)	Accepts a Research Scientist position at Saudi Aramco, KSA
2025 (Yi)	Accepts a Research Scientist position at META, California, USA
2025 (Condat)	World's Top 2% Scientist by Stanford
2024 (Tyurin)	Joins Skoltech as an **Assistant Professor** & AI Research Institute (AIRI) as a **Team Leader**
2024 (Yi)	Oral at NeurIPS 2024
2024 (Ilin)	Oral at NeurIPS 2024
2024 (Burlachenko)	Oral at NeurIPS 2024
2024 (Tyurin)	**4 papers accepted at NeurIPS 2024**
2024 (Tyurin)	Spotlight at NeurIPS 2024
2024 (Gruntkowska)	Spotlight at NeurIPS 2024
2024 (Gruntkowska)	Nominated by KAUST for Apple Doctoral Scholarship
2024 (Gruntkowska)	Al-Kindi Research Award (Statistics), KAUST
2024 (Malinovsky)	**ICML 2024 Best Reviewer**
2024 (Gruntkowska)	Dean's List[46], Statistics, KAUST
2024 (Malinovsky)	Dean's List, Applied Mathematics and Computational Science, KAUST
2024 (Sadiev)	Dean's List, Computer Science, KAUST
2024 (Condat)	World's Top 2% Scientist by Stanford
2024 (Malinovsky)	**NeurIPS 2024 Top Reviewer**
2024 (Malinovsky)	Summer of Reproducibility 2023 Flower AI Award[47] for implementing the TAMUNA algorithm (based on paper [217])
2024 (Agarský)	Summer of Reproducibility 2023 Flower AI Award for implementing the TAMUNA algorithm (based on paper [217])
2023 (Malinovsky)	Nominated by KAUST for Apple PhD Scholarship[48]
2023 (Tyurin)	**4 papers accepted at NeurIPS 2023**
2023 (Sun)	Dean's List[49], Computer Science, KAUST
2023 (Burlachenko)	Dean's List, Computer Science, KAUST
2023 (Sadiev)	Dean's List, Computer Science, KAUST
2023 (S. Hanzely)	Dean's List, Applied Mathematics and Computational Science, KAUST
2023 (Malinovsky)	Dean's List, Applied Mathematics and Computational Science, KAUST
2023 (Mishchenko[50])	**ICML 2023 Outstanding Paper Award (0.09% success rate)**
2023 (Mishchenko)	**Action Editor, Transactions on Machine Learning Research (TMLR)**
2023 (Gruntkowska)	Dean's Award (Statistics)[51], KAUST
2023 (Maranjyan)	Dean's Award (Computer Science), KAUST
2023 (Mishchenko)	Joins Samsung AI, Cambridge, UK, as a **Research Scientist**
2023 (Condat)	World's Top 2% Scientist by Stanford
2023 (Fatkhullin[52])	**NeurIPS 2023 Top Reviewer**
2022 (Kovalev)	**6 papers accepted at NeurIPS 2022**
2022 (Burlachenko)	Grant from AMD Inc (two GPUs)
2022 (Beznosikov[53])	**NeurIPS 2022 Top Reviewer**[54]

[46] In 2024, given to top 20% students at KAUST annually. Carries a 2,500 USD cash prize.

[47] $ 2,000 Cash Prize shared with Ivan Agarský.

[48] Several invited institutions can nominate up to 3 students.

[49] Given to top 25% students at KAUST annually. Carries a 2,500 USD cash prize.

[50] Former PhD student

[51] A financial add-on to the KAUST Fellowship, worth 6,000 USD annually, given to a few best incoming students by the Dean.

[52] Former intern.

[53] Former intern.

[54] https://neurips.cc/Conferences/2022/ProgramCommittee

2022 (Tyurin)	**NeurIPS 2022 Top Reviewer**
2022 (Gorbunov)	**NeurIPS 2022 Top Reviewer**
2022 (Malinovsky)	**NeurIPS 2022 Top Reviewer**
2022 (Sokolov)	**NeurIPS 2022 Top Reviewer**
2022 (Safaryan)	**NeurIPS 2022 Top Reviewer**
2022 (Mútny[55])	**NeurIPS 2022 Top Reviewer**
2022 (Gower[56])	**NeurIPS 2022 Top Reviewer**
2022 (Kovalev)	Joins Université catholique de Louvain as a **postdoc** with Yurii Nesterov
2022 (Malinovsky)	**2022 CEMSE Academic Excellence Award**[57]
2022 (S. Hanzely)	**2022 CEMSE Student Research Excellence Award**
2022 (Shulgin)	**ICML 2022 Outstanding (Top 10%) Reviewer**[58]
2022 (Gasanov)	**ICML 2022 Outstanding (Top 10%) Reviewer**
2022 (Gorbunov)	**ICML 2022 Outstanding (Top 10%) Reviewer**
2022 (Khaled)	**ICML 2022 Outstanding (Top 10%) Reviewer**
2022 (Condat)	**ICML 2022 Outstanding (Top 10%) Reviewer**
2022 (Sadiev)	**ICML 2022 Outstanding (Top 10%) Reviewer**
2022 (Tyurin)	**ICML 2022 Outstanding (Top 10%) Reviewer**
2022 (Sokolov)	**ICML 2022 Outstanding (Top 10%) Reviewer**
2022 (Horváth)	**ICML 2022 Outstanding (Top 10%) Reviewer**
2022 (Szlendak)	**ICML 2022 Outstanding (Top 10%) Reviewer**
2022 (Mishchenko)	**ICML 2022 Outstanding (Top 10%) Reviewer**
2022 (Mishchenko)	**ICLR 2022 Highlighted Reviewer**
2022 (Sadiev)	Dean's Award, KAUST
2022 (Sadiev)	KAUST Doctoral Development Fellowship
2022 (Szlendak)	Dean's Award (Applied Mathematics), KAUST
2022 (Szlendak)	KAUST Doctoral Development Fellowship
2022 (Shulgin)	Research Internship at Apple, Cambridge, UK
2022 (S. Hanzely)	Research Internship at the Flatiron Institute, New York, USA
2022 (S. Hanzely)	Research Internship at the MBZUAI, Abu Dhabi, KSA
2022 (Malinovsky)	Research Internship at the CISPA Helmholtz Center for Information Security, Saarbrucken, Germany
2022 (Gorbunov)	Joins **Mohamed bin Zayed University of Artificial Intelligence**, Abu Dhabi, UAE, as a **Postdoc**
2022 (Horváth)	Joins **Mohamed bin Zayed University of Artificial Intelligence**, Abu Dhabi, UAE, as an **Assistant Professor**
2022 (Safaryan)	**AISTATS 2022 Top Reviewer**
2022 (Khaled)	**AISTATS 2022 Top Reviewer**
2022 (Loizou)	Joins **The Johns Hopkins University as an Assistant Professor** in the Department of Applied Mathematics & Statistics, and the Mathematical Institute for Data Science (MINDS), with a secondary appointment in Computer Science
2022 (Khaled)	Joins **Princeton University** as a **PhD Student in the ECE Department**[59]
2022 (Gower[60])	**Action Editor, Transactions of Machine Learning Research (TMLR)**
2022 (Condat)	World's Top 2% Scientist by Stanford[61]

[55] Former intern.

[56] Former PhD student.

[57] Carries a $2,500 cash prize.

[58] https://icml.cc/Conferences/2022/Reviewers

[59] https://rka97.github.io

[60] Former PhD student.

[61] https://elsevier.digitalcommonsdata.com/datasets/btchxktzyw/4?fbclid=IwAR0u4xhKMuKGIsi_prZLxOIOaMPzV-LNCmoIlDYua90eybIVIyE6Sl70vyc

2021 (Malinovsky)	**2021 CEMSE Student Research Excellence Award**[62]
2021 (Kovalev)	**2021 CEMSE Student Research Excellence Award**[63]
2021 (S. Hanzely)	**2021 CEMSE Student Research Excellence Award**
2021 (Horváth)	**2021 Al-Kindi Statistics Research Student Award**[64]
2021 (Mishchenko)	**Rising Stars in Data Science**; invited talk to a workshop at the University of Chicago[65]
2021 (Gorbunov)	**NeurIPS 2021 Outstanding (Top 8%) Reviewer Award**
2021 (Mishchenko)	**NeurIPS 2021 Outstanding (Top 8%) Reviewer Award**
2021 (Shulgin)	Research Internship at Samsung AI Research Center, Cambridge, UK
2021 (Horváth)	Research Internship at Facebook AI Research, Canada
2021 (Mishchenko)	**ICML 2021 Top 10% Reviewer**
2021 (Gorbunov)	**ICML 2021 Top 10% Reviewer**
2021 (Mishchenko)	**ICML 2021 Expert Reviewer**
2021 (F. Hanzely)	**ICML 2021 Expert Reviewer**
2021 (Gorbunov)	**ICML 2021 Expert Reviewer**
2021 (Condat)	**ICML 2021 Expert Reviewer**
2021 (Kovalev, Gasanov)	**Best Student Paper Award** at the International Workshop on Federated Learning for User Privacy and Data Confidentiality in Conjunction with ICML 2021 (for joint paper [166])
2021 (Kovalev)	**Ilya Segalovich Prize for Young Researchers**[66]
2021 (Mishchenko)	**Most Popular Spotlight Talk** (2nd place) at KAUST Conference on AI
2021 (Mishchenko)	**ICLR 2021 Outstanding Reviewer Award**
2021 (Gorbunov)	**ICLR 2021 Outstanding Reviewer Award**
2021 (Condat)	Associate Editor, IEEE Transactions on Signal Processing
2021 (Condat)	World's Top 2% Scientist by Stanford
2020 (F. Hanzely)	Joined **Toyota Tech. Institute at Chicago as a Research Assistant Professor**
2020 (Mishchenko)	**2020 CEMSE Student Research Excellence Award**[67]
2020 (S. Hanzely)	**2020 CEMSE Student Research Excellence Award**
2020 (Horváth)	**Best Paper Award at the NeurIPS 2020 Workshop on Scalability, Privacy, and Security in Federated Learning** (for joint paper [135])
2020 (Loizou)	**Runner Up for OR Society Best Doctoral Dissertation Prize**[68] (for year 2019)
2020 (Horváth)	**NeurIPS 2020 Best Reviewer Award**[69]
2020 (Gorbunov)	**NeurIPS 2020 Best Reviewer Award**
2020 (F. Hanzely)	**NeurIPS 2020 Best Reviewer Award**
2020 (Condat)	**NeurIPS 2020 Best Reviewer Award**
2020 (Khaled)	**NeurIPS 2020 Best Reviewer Award**

[62] Given annually to a handful of the best Applied Mathematics students at KAUST. "The recipients exemplify the highest of academic standards and represent our confidence in your future contributions to the KAUST community, academia, and science." Carries a $1,000 cash prize.

[63] Given annually to a handful of the best Computer Science students. "The recipients exemplify the highest of academic standards and represent our confidence in your future contributions to the KAUST community, academia, and science."

[64] Given annually to a handful of the best Statistics students at KAUST. "The recipients exemplify the highest of academic standards and represent our confidence in your future contributions to the KAUST community, academia, and science."

[65] The Rising Stars in Data Science workshop at the University of Chicago focuses on celebrating and fast tracking the careers of exceptional data scientists at a critical inflection point in their career: the transition to postdoctoral scholar, research scientist, industry research position, or tenure track position. An event associated with the The Center for Data and Computing (CDAC) at the University of Chicago.

[66] Four awards were given; each award carries a cash prize of 1,000,000 RUB ($\approx$ 14,000 USD).

[67] One of 5 awards given to KAUST Computer Science students.

[68] The OR Society was created in April 1948 as the Operational Research Club, becoming the OR Society in 1953. It is the world's oldest-established learned society catering to the OR profession and one of the largest in the world, with members in 53 countries https://en.wikipedia.org/wiki/Operational_Research_Society.

[69] https://icml.cc/Conferences/2020/Reviewers

2020 (Mishchenko)	**ICML 2020 Top Reviewer**
2020 (Khaled)	Finalist, INFORMS Undergraduate Operations Research Prize[70]
2020 (Shulgin)	Summer Research Fellowship, Department of Computer Science, ETH Zürich, Switzerland
2020 (Horváth)	Research Internship at Samsung AI Research Center, Cambridge, UK
2020 (Mishchenko)	Research Internship at Google, USA (performed remotely due to Covid-19)
2020 (Kovalev)	**Ilya Segalovich Prize for Young Researchers**[71]
2020 (Burlachenko)	Dean's Award, KAUST
2020 (Malinovsky)	Dean's Award, KAUST
2020 (Mishchenko)	**AAAI 2020 Outstanding Program Committee Member Award** (awarded to top 12 out of over 6,000 reviewers)
2020 (Condat)	World's Top 2% Scientist by Stanford
2019 (Mishchenko)	**NeurIPS 2019 Best Reviewer Award**
2019 (Horváth)	**NeurIPS 2019 Best Reviewer Award**
2019 (Gorbunov)	**Ilya Segalovich Award**[72]
2019 (S. Hanzely)	Dean's Award, KAUST
2019 (F. Hanzely)	Research Internship at Google, New York
2019 (Horváth)	Research Internship at Amazon, Berlin
2019 (Sailanbayev)	Research Internship at Intel, Germany
2018 (Kovalev)	Dean's Award, KAUST
2018 (Loizou)	Research Internship at Facebook AI Research (FAIR), Montréal
2018 (Mishchenko)	Research Internship at Amazon, Seattle
2018 (F. Hanzely)	Research Internship at Microsoft Research (with Lin Xiao)
2018 (F. Hanzely)	Research Internship at Amazon, Berlin, Scalable Machine Learning Group
2018 (Horváth)	**Best DS^3 Poster Award**[73], Paris (1st Prize; for joint paper [81])
2018 (Doikov)	**Best Talk Award**[74], Voronovo, Russia (1st Prize; for joint paper [69])
2018 (F. Hanzely)	WEP Best Poster Award (3rd Place), KAUST
2017 (Mishchenko)	Dean's Award, KAUST
2017 (Lukáček)	Dean's Award, KAUST
2017 (F. Hanzely)	Dean's Award, KAUST
2017 (Gorbunov)	Winner, Section of Information Transmission Problems, Data Analysis and Optimization, 60th Scientific Conference of MIPT, Russia
2017 (Gower)	**18th IMA Leslie Fox Prize**[75] (2nd Prize; for joint paper [39])
2016 (Csiba)	Postgraduate Essay Prize, School of Mathematics, University of Edinburgh
2016 (F. Hanzely)	**CASE PhD Studentship** (£93,333 award; 3/4 from EPSRC, 1/4 from Amazon)
2016 (Loizou)	A. G. Leventis Foundation Grant for PhD studies
2015 (Takáč)	**OR Society Best Doctoral Dissertation Prize** (for year 2014)
2015 (Loizou)	A. G. Leventis Foundation Grant for PhD studies
2015 (Loizou)	Principal's Career Development Scholarship[76] (in Data Science)
2015 (Kisiala)	Best Student Prize[77], OR MSc Programme, School of Mathematics, Edinburgh

[70] One of ten finalists selected to present outstanding research done as an undergraduate.

[71] Nine awards were given in the area of Computer Science; each award carries a cash prize of 350,000 RUB ($\approx$ 5,000 USD).

[72] Yandex scientific scholarship; 9 winners from Russia, Belarus and Kazakhstan; carries a cash prize of 350,000 RUB.

[73] DS^3 stands for Data Science Summer School, held at École Polytechnique, Paris, during June 25–29, 2018. There were 170 posters in the competition, from MS and PhD students, and postdocs. Samuel's poster, based on joint work [81], won the main prize, which also attracted a 500 EUR check.

[74] Event: "Traditional Youth School in Control, Information and Optimization", organized by Boris Polyak.

[75] "The Leslie Fox Prize is a biennial prize established in 1985 by the IMA in honour of mathematician Leslie Fox (1918-1992). The prize honours young numerical analysts worldwide (any person less than 31 years old), and applicants submit papers for review. A committee [...] awards First Prize and Second Prizes based on mathematical and algorithmic brilliance in tandem with presentational skill"

[76] Principal's Career Development Scholarship: A highly competitive scholarship offered to 3 incoming PhD students in mathematics at the University of Edinburgh each year.

[77] For best performance in courses and MSc Dissertation, which I supervised.

2015 (Fercoq)	**17th IMA Leslie Fox Prize** (2nd Prize; for joint paper [21])
2015 (Csiba)	**Best Contribution Award** (2nd Prize; for joint paper [35]), Workshop: Optimization and Big Data, Edinburgh. Committee: Arkadi Nemirovskii (Georgia Tech) and Rodolphe Jenatton (Amazon)
2015 (Konečný)	**BASP Frontiers Best Contribution Award** (1st prize in the field of signal processing; for joint paper [20]), Villars-sur-Ollon, Switzerland
2014 (Konečný)	**Google European Doctoral Fellowship**[78] ($180,000 unrestricted gift funding Jakub's PhD for 3 years)
2014 (Csiba)	Principal's Career Development Scholarship (in Data Science)
2013 (Konečný)	Principal's Career Development Scholarship (in Data Science)
2013 (Takáč)	**16th IMA Leslie Fox Prize** (2nd Prize; for joint paper [10])
2013 (Takáč)	SIAM Certificate in Recognition of Outstanding Efforts and Accomplishments, on behalf of the SIAM Chapter at the University of Edinburgh for academic year 2012–2013
2012 (Takáč)	**INFORMS Computing Society Best Student Paper Prize** (sole runner up; for joint paper [8]), Phoenix, Arizona
2012 (Banks-Watson)	Best Student Prize, OR MSc Programme, School of Mathematics, Edinburgh
2012 (Takáč)	**Best Talk Award**, SIAM National Student Chapter Conference, Manchester, UK
2012 (Takáč)	Best Talk Award, Edinburgh Postgraduate Colloquium, University of Edinburgh
2012 (Takáč)	Alice Margaret Campbell Bequest Fund Award for success in 1st year of PhD
2011 (Takáč)	Certificate of Appreciation, 24th Biennial Conf. on Numerical Analysis, Glasgow, UK
2011 (Takáč)	Best Poster Award, SIAM Student Chapter Conference, Edinburgh, UK

8.7 MY TEAM: SELECTED PRIOR/INDEPENDENT ACHIEVEMENTS[79]

2026 (Loizou)	**NSF CAREER Award**[80]
2026 (Gower)	Outstanding Paper Honorable Mention Award[81] at ICLR 2026
2026 (Takáč)	Distinguished Paper Award, 6th AdvML@CV Workshop (held in conjunction with CVPR 2026)
2026 (Gorbunov)	Best Application Paper Award, MOTOR 2026
2026 (Loizou)	**AFOSR Young Investigator Program (YIP) Award** (Computational Mathematics)
2026 (Maranjyan)	EPFL AI Center and Swiss AI Initiative Postdoctoral Fellowship
2026 (B. Wang)	Early Career Postdoctoral Fellowship, The University of Texas at Austin
2026 (Gower)	ICML 2026 Gold Reviewer
2026 (Tyurin)	ICML 2026 Best Reviewer
2026 (Yi)	ICML 2026 Gold Reviewer
2026 (B. Wang)	ICML 2026 Gold Reviewer
2026 (Islamov)	ICML 2026 Top Reviewer
2026 (Islamov)	ICLR 2026 Top Reviewer
2026 (Tyurin)	Area Chair, ICLR
2026 (Tyurin)	Area Chair, NeurIPS
2026 (Záhorský)	Coordinator, European Girls' Mathematical Olympiad, Bordeaux, France

[78] Google quote: "Nurturing and maintaining strong relations with the academic community is a top priority at Google. Today, we're announcing the 2014 Google PhD Fellowship recipients. These students, recognized for their incredible creativity, knowledge and skills, represent some of the most outstanding graduate researchers in computer science across the globe. We're excited to support them, and we extend our warmest congratulations."

[79] These awards are independent of my input, and were in most cases obtained before joining my team.

[80] Project: "Structural and Algorithmic Foundations of Variational Inequalities in Machine Learning: From Principles to Scalability". https://www.nsf.gov/awardsearch/show-award/?AWD_ID=2542902

[81] Two papers won the Main Prize, and one paper won the Honorable Mention Award. More than 19,000 papers were submitted to ICLR in 2026.

2025 (Gorbunov)	Area Chair, NeurIPS
2025 (Kovalev)	National Award "AI Leaders", AI Journey 2025 Conference, Russia
2025 (Kovalev)	Boris Polyak Scientific Prize for Young Researchers, Innopolis University, Russia
2025 (Tyurin)	Data Fusion Award, Russia
2025 (Loizou)	Johns Hopkins Catalyst Award
2025 (Gower)	NeurIPS 2025 Top Reviewer
2025 (Islamov)	NeurIPS 2025 Top Reviewer
2025 (Islamov)	ICML 2025 Top Reviewer
2025 (Khaled)	AISTATS 2025 Best Reviewer
2025 (B. Wang)	ICLR 2025 Notable Reviewer
2025 (Fatkhullin)	TMLR Expert Reviewer
2025 (Fatkhullin)	Oral Presentation Award, OPT 2025 Workshop at NeurIPS 2025
2025 (Fatkhullin)	Oral Presentation Award for the best fundamental contribution, COML 2025 Workshop at NeurIPS 2025
2024 (Gorbunov)	Action Editor, TMLR
2024 (Mishchenko)	Action Editor, TMLR
2024 (Takáč)	Senior Area Chair, NeurIPS
2024 (Tyurin)	Yandex ML Prize, Russia
2024 (Chen)	Stars of Tomorrow Award, Microsoft Research
2024 (Qu)	Excellent Young Scientists Fund (Overseas), National Natural Science Foundation of China (NSFC)
2024 (Záhorský)	Coordinator, European Girls' Mathematical Olympiad, Tskaltubo, Georgia
2023 (Gower)	Action Editor, TMLR
2023 (Záhorský)	Member, Slovak Committee of Mathematical Olympiad
2023 (Beznosikov)	Yandex ML Prize, Russia
2023 (Loizou)	Cisco Research Award
2023 (Salim)	Best Student Paper Award, ALT 2023 (for paper co-authored with an MSR intern)
2023 (Qu)	Invited Speaker, International Congress of Chinese Mathematicians (ICCM)
2023 (Gruntkowska)	Worcester College Prize, University of Oxford, UK
2023 (Beznosikov)	National Award "AI Leaders" (Prize for Scientists), AI Journey 2023 Conference, Russia
2023 (Luo)	Named in the first Global List of Chinese Female Young Scholars in AI, Baidu Scholar
2022 (Záhorský)	Coordinator, European Girls' Mathematical Olympiad, Hugary
2022 (Condat)	Meritorious Service Award from the journal Mathematical Programming[82]
2022 (Burlachenko)	Second Place, KAUST Chess Tournament
2022 (Safaryan)	Marie Skłodowska-Curie Fellowship (MSCA COFUND IST-BRIDGE), ISTA, Austria
2022 (Gruntkowska)	Outstanding Overall Performance Prize, Statistics, University of Warwick, UK
2022 (Gruntkowska)	Academic Excellence Prize, Statistics, University of Warwick, UK
2022 (Tovmasyan)	Third Prize (team competition), Open Mathematical Olympiad for University Students
2022 (Luo)	First Prize, Shaanxi Provincial Natural Science Award, China
2022 (Luo)	Second Prize, National Teaching Achievement Award, China
2021 (Gaponov)	Bronze Medal, Belarusian National Olympiad in Competitive Programming
2021 (Maranjyan)	Outstanding Final Project Award[83], Yerevan State University, Armenia
2021 (Salim)	Google Research Fellowship, Simons Institute, UC Berkeley, USA
2021 (Fatkhullin)	ETH AI Center Doctoral Fellowship, ETH Zürich, Switzerland
2021 (Chen)	Cambridge-Tübingen PhD Fellowship in Machine Learning
2021 (Chen)	Cambridge Trust Scholarship, University of Cambridge, UK
2021 (Demidovich)	Simons Foundation Prize for PhD students, Independent University of Moscow, Russia
2021 (Szlendak)	Outstanding Academic Excellence Prize, University of Warwick, UK

[82]Mathematical Programming is the leading optimization journal. "The Meritorious Service Award was created to acknowledge these continued efforts. In 2022 our Editorial Board assessed the referees who have demonstrated exceptional diligence in their service to the journal."

[83]Awarded to 6 students from more than 250 students for best undergraduate thesis.

2021 (Luo)	Wang Kuancheng Young Scholar Award, China
2020 (Záhorský)	Deputy Leader, 14th Middle European Mathematical Olympiad, virtual
2020 (Basyoni)	National Deputy Leader and Head Coach at the International Olympiad of Informatics, Saudi Arabia
2020 (Doikov)	ICML 2020 Top Reviewer
2020 (Gower)	NeurIPS 2020 Top 10% Reviewer
2020 (Chen)	Royal Statistical Society Prize, UK
2020 (Fatkhullin)	German Academic Exchange Service (DAAD) Scholarship for MSc studies in Germany
2020 (Fatkhullin)	PreDoc Program Fellowship in Mathematics, Technical University of Munich, Germany
2020 (Luo)	Special Prize, Science and Technology Progress Award, Chinese Association of Automation
2020 (Papamakarios)	Finalist, Savage Award (Theory & Methods), International Society for Bayesian Analysis
2019 (Záhorský)	Deputy Leader, 13th Middle European Mathematical Olympiad, Pardubice, Czech Republic
2019 (Panferov)	Gold Medal, International Physics Olympiad, Tel Aviv, Israel
2019 (Riabinin)	Winner, Phystech Olympiad in Physics, Dolgoprudny, Russia
2019 (Basyoni)	National Deputy Leader and Head Coach at the International Olympiad of Informatics, Saudi Arabia
2019 (Li)	Tsinghua Outstanding Doctoral Dissertation Award
2019 (Loizou)	IVADO Postdoctoral Fellowship, Mila and Université de Montréal, Canada
2019 (Khirirat)	Best Student Paper Award, IEEE ICASSP 2019
2019 (Doikov)	NeurIPS 2019 Best Reviewer Award
2019 (Gower)	ICML 2019 Top 5% Reviewer
2019 (Doikov)	Best Paper Presentation Award, OBA School
2019 (Malinovsky)	Best Talk Award, 62nd Scientific Conference of MIPT (Section: Data Analysis, Recognition and Prediction), Dolgoprudny, Russia
2019 (Malinovsky)	Best Poster Award, Traditional Youth School "Control, Information and Optimization", Voronovo, Russia
2019 (Takáč)	Richard P. Vinci Award for Educational Excellence, P.C. Rossin College of Engineering and Applied Science, Lehigh University, USA
2019 (Khan)	Bronze Medal, 60th International Mathematical Olympiad, Bath, UK (representing Pakistan)
2018 (Záhorský)	Silver Medal, 59th International Mathematical Olympiad, Cluj-Napoca, Romania (representing Slovakia)
2018 (Riabinin)	Prizewinner, Regional Stage of the All Russian Olympiad in Physics, Russia
2018 (Riabinin)	2nd Place, City Physics Olympiad, Nizhny Novgorod, Russia
2018 (Riabinin)	Prizewinner, Phystech Olympiad in Mathematics, Dolgoprudny, Russia
2018 (Mishchenko & Sailanbayev)	71st Place, 2018 IEEEXtreme programming competition[84]
2018 (Tyurin)	Ilya Segalovich Award, Yandex, Russia
2018 (Condat)	Competitive long-term fellowship from the Japan Society for the Promotion of Science (JSPS), Ritsumeikan University, Kyoto, Japan
2018–2021 (Condat)	Award for Scientific Excellence (PEDR), CNRS, France
2018 (Takáč)	Faculty of the Year 2017/18 (selected by PhD students), Industrial and Systems Engineering, Lehigh University, USA
2018 (Khan)	Honourable Mention, 59th International Mathematical Olympiad, Cluj-Napoca, Romania (representing Pakistan)
2017 (Záhorský)	Honorable Mention, 58th International Mathematical Olympiad, Rio de Janeiro, Brazil (representing Slovakia)

[84] 4,000 teams (of size 3) from all over the world competed in a 24-hour time span against each other to solve a set of programming problems. Konstantin and Alibek scored high despite being just 2 on the team!

2017 (Ilin)	Captain of the Russian team @ International Young Physicists Tournament, Singapore/Russia
2017 (Karagulyan)	Second Prize, International Mathematical Competition for University Students, Blagoevgrad, Bulgaria
2017 (S. Hanzely)	8–10th Place, Vojtech Jarník International Mathematical Competition (1st place among Czech and Slovak contestants)
2017 (Horváth)	37th Place, Vojtech Jarník International Mathematical Competition, Ostrava, Czech Republic
2017 (Mishchenko)	1st Place, Plume Labs machine learning competition on air pollution prediction
2017 (Karagulyan)	Gold Medal, Yerevan State University, Armenia
2017 (Horváth)	2nd Place, CFA Institute Research Challenge, CFA Society Czech Republic
2017 (Gorbunov)	Third Prize, MIPT Student Olympiad in Mathematics, Moscow, Russia
2017 (Gorbunov)	First Prize, MIPT Team Mathematical Tournament, Moscow, Russia
2017 (Takáč)	Master's Faculty of the Year 2016/17, Industrial and Systems Engineering, Lehigh University, USA
2017 (Dutta)	Professor Lee H. Armstrong Award for Distinguished Teachers, Department of Mathematics, University of Central Florida, USA
2017 (Khan)	Honourable Mention, 58th International Mathematical Olympiad, Rio de Janeiro, Brazil (representing Pakistan)
2016 (Záhorský)	Silver Medal, 10th Middle European Mathematical Olympiad, Vöcklabruck, Austria (representing Slovakia)
2016 (Karagulyan)	2nd Prize, Mirror of William Lowell Putnam Mathematical Competition
2016 (Malinovsky)	Abramov's Scholarship for students with the best grades at MIPT
2016 (S. Hanzely)	Participation, 57th International Mathematical Olympiad, Hong Kong
2016 (S. Hanzely)	3rd Place, Slovak National Mathematical Olympiad
2016 (S. Hanzely)	1st Place, Slovak Mathematical Olympiad, Regional Round
2016 (S. Hanzely)	1st Place, Slovak Informatics Olympiad, Regional Round
2016 (Horváth)	36th Place, Vojtech Jarník International Mathematical Competition, Ostrava, Czech Republic
2016 (Karagulyan)	Third Prize, International Mathematical Competition for University Students, Blagoevgrad, Bulgaria
2016 (Horváth)	3rd Prize, International Mathematical Competition for University Students, Blagoevgrad, Bulgaria
2016 (Sailanbayev)	Semifinalist, ACM ICPC Programming Contest, NEERC region, Almaty, Kazakhstan
2016 (Mishchenko)	Paris Graduate School of Mathematics Fellowship (2016–2017; awarded to 24 people from 12 countries)
2016 (Gower)	Laureate Fellowship, Fondation Sciences Mathématiques de Paris, France
2016 (Karagulyan)	Best Student Award, Yerevan State University, Armenia
2016 (Tyurin)	"Lukoil" Award, Russia
2016 (Dutta)	Outstanding Dissertation Award, Department of Mathematics, University of Central Florida, USA
2015 (Karagulyan)	Second Prize, International Mathematical Competition for University Students, Blagoevgrad, Bulgaria
2015 (Karagulyan)	Semifinalist, ACM-ICPC Programming Contest, NEERC region, Tbilisi, Georgia
2015 (S. Hanzely)	Bronze Medal, Middle European Mathematical Olympiad
2015 (S. Hanzely)	2nd Place, Slovak Informatics Olympiad, Regional Round
2015 (Sailanbayev)	2nd Prize, International Mathematical Competition for University Students, Blagoevgrad, Bulgaria
2015 (Mishchenko)	1st Prize, HSE Olympiad in Applied Mathematics and Informatics, Moscow, Russia
2015 (Gorbunov)	Third Prize, MIPT Student Olympiad in Mathematics, Moscow, Russia
2015 (H. H. Nguyen)	Silver Medal, 56th International Mathematical Olympiad, Chiang Mai, Thailand (representing Vietnam)
2015 (Beznosikov)	Bronze Medal, International Experimental Physics Olympiad (IEPhO)

2014 (Karagulyan)	Semifinalist, ACM-ICPC Programming Contest, NEERC region, Tbilisi, Georgia
2014 (Malinovsky)	Bronze Medal, International Zhautykov Olympiad in Physics
2014 (Malinovsky)	Participant, All-Russian Physics Olympiad
2014 (S. Hanzely)	1st Place, Slovak Mathematical Olympiad, Regional Round
2014 (Kovalev)	Honorable Mention, 15th Asian Physics Olympiad, Singapore
2014 (Kovalev)	Winner, All Russian Mathematics Olympiad (Moscow Region)
2014 (Kovalev)	Winner, All Russian Computer Science Olympiad (Moscow Region)
2014 (Kovalev)	Prizewinner, All Russian Physics Olympiad
2014 (Mishchenko)	3rd Prize, MIPT Student Mathematical Olympiad, Moscow, Russia
2014 (Horváth)	18th Place, National Mathematical Olympiad, Bratislava, Slovakia
2014 (Horváth)	1st Place, Nitra Region Mathematical Olympiad, Category A, Slovakia
2014 (Sailanbayev)	2nd Prize, International Mathematical Competition for University Students, Blagoevgrad, Bulgaria
2014 (Loizou)	Top 1% in Mathematics at National and Kapodestrian University of Athens, Greece
2014 (Csiba)	Best Student Work in Applied Informatics in Czech and Slovak Republic, Annual Student Scientific Conference, Ústí nad Labem, Czech Republic
2014 (F. Hanzely)	2nd Prize (101st place), International Mathematical Competition for University Students, Blagoevgrad, Bulgaria
2014 (F. Hanzely)	9th Place, V. Jarník International Mathematical Competition, Ostrava, Czech Republic
2014 (Lukáček)	26th Place, Vojtech Jarník International Mathematical Competition, Ostrava, Czech Republic
2014 (Gower)	Best Talk Prize, Irish SIAM Student Meeting
2014 (Condat)	Runner-up for the Best Paper Award, IEEE ICIP 2014
2014 (Luo)	Excellent Doctoral Dissertation Nomination Award, Chinese Association for Artificial Intelligence (CAAI)
2013 (Karagulyan)	Semifinalist, ACM-ICPC Programming Contest, NEERC region, Tbilisi, Georgia
2013 (Karagulyan)	2nd Prize, Mirror of William Lowell Putnam Mathematical Competition
2013 (Malinovsky)	Prizewinner, All-Russian Physics Olympiad
2013 (S. Hanzely)	1st Place, Slovak Mathematical Olympiad, Regional Round
2013 (Kovalev)	Winner, All Russian Physics Olympiad
2013 (Sailanbayev)	Silver Medal, International Mathematical Olympiad, Santa Marta, Colombia
2013 (F. Hanzely)	Bronze Medal, International Mathematical Olympiad, Santa Marta, Colombia
2013 (Karagulyan)	Honourable Mention, International Mathematical Olympiad, Santa Marta, Colombia
2013 (Basyoni)	Bronze Medal, International Mathematical Olympiad, Santa Marta, Colombia
2013 (Sailanbayev)	1st Place, National Mathematical Olympiad, Kazachstan
2013 (F. Hanzely)	1st Place, Slovak National Round of Mathematical Olympiad, Košice, Slovakia
2013 (Sailanbayev)	Gold Medal, International Zhautykov Olympiad, Almaty, Kazakhstan
2013 (Lukáček)	20th Place, Vojtech Jarnik International Mathematical Competition, Ostrava, Czech Republic
2013 (Fercoq)	Gaspard Monge Prize "for best PhD thesis defended in France 2012 in mathematics or computer science, with significant contributions to Optimization and Operations Research"
2013 (Qu)	Chinese Government Award for Outstanding Self-Financed Students Abroad
2013 (Malinovsky)	Winner, All-Russian Astronomy Olympiad, Region Round, Kazan, Russia
2012 (Karagulyan)	Honourable Mention, International Mathematical Olympiad, Mar del Plata, Argentina
2012 (Kovalev)	Prizewinner, All Russian Physics Olympiad
2012 (Lukáček)	3rd Prize, International Mathematical Competition for University Students, Blagoevgrad, Bulgaria
2012 (Mishchenko)	1st Prize, Moscow Mathematical Olympiad, Moscow, Russia
2012 (Mishchenko)	1st Prize, PhysTech International Olympiad in Mathematics
2012 (Basyoni)	Silver Medal[85], International Mathematical Olympiad, Mar del Plata, Argentina

[85]Historically the first silver medal at IMO by Saudi Arabia.

2012 (Sailanbayev)	Bronze Medal, International Mathematical Olympiad, Mar del Plata, Argentina
2012 (Sailanbayev)	Silver Medal, Balkan Mathematical Olympiad, Antalya, Turkey
2012 (F. Hanzely)	Bronze Medal, Middle European Mathematical Olympiad, Solothurn, Switzerland
2012 (Csiba)	FIDE International Master in Chess
2012 (Csiba)	3rd Prize, International Mathematical Competition, Blagoevgrad, Bulgaria
2012 (Konečný)	2nd Prize, International ChaLearn Competition, One shot learning of gestures from Microsoft Kinect videos
2012 (Luo)	Google Anita Borg Scholarship, China
2012 (Lukáček)	2nd Place, International Correspondence Seminar in Mathematics (iKS)
2012 (Kamzolov)	2nd Diploma, Moscow Mathematical Olympiad, Russia
2012 (Kamzolov)	2nd Diploma, Saint Petersburg Mathematical Olympiad, Russia
2012 (Condat)	JSPS Fellowship, Yamaguchi University, Japan
2012 (Gower)	University of Edinburgh PhD Scholarship
2011 (Lukáček)	Bronze Medal (26th Place), Middle European Mathematical Olympiad, Varaždin, Croatia
2011 (Kamzolov)	2nd Diploma, Moscow Mathematical Olympiad, Russia
2011 (Kamzolov)	2nd Diploma, Saint Petersburg Mathematical Olympiad, Russia
2011 (Basyoni)	Bronze Medal, International Mathematical Olympiad, Amsterdam, Netherlands
2010–2011 (Doikov)	Prizewinner, Russian National Olympiad in Informatics
2010 (Konečný)	Honourable Mention, International Mathematical Olympiad, Astana, Kazachstan
2010 (Csiba)	Honourable Mention, Middle European Mathematical Olympiad, Žilina, Slovakia
2008 (Konečný)	Honourable Mention, Middle European Mathematical Olympiad, Olomouc, Czech Republic
2007–2009 (Takáč)	Winner, 3rd Place and Honourable Mention (twice), International Student Scientific Conference, Czech and Slovak Republic
2007 (Condat)	Best PhD Thesis Award, Grenoble Institute of Technology (INPG), France
2005 (Condat)	Best Student Paper Award, IEEE ICIP 2005

9. TALKS

9.1 TALKS: SUMMARY

I have given **more than 270 research talks**[86] at conferences, workshops and seminars worldwide (Australia, Austria, Belgium, Brazil, Canada, Chile, China, Cuba, France, Germany, Greece, Hong Kong, Hungary, India, Japan, Mongolia, Morocco, Netherlands, Portugal, Russia, Saudi Arabia, Slovakia, Slovenia, Spain, Switzerland, UAE, United Kingdom, Uruguay, USA). Out of these, **≈80 are plenary talks** at conferences and workshops, **≈30 are invited PhD courses and tutorials**, **≈100 are seminar talks**, and the rest are invited and contributed conference talks. I regularly give talks at the premier international optimization conferences (each taking place once in 3 years): Int. Symposium on Mathematical Programming (Rio'06, Chicago'09, Berlin'12, Pittsburgh'15, Bordeaux'18), SIAM Conf. on Optimization (Darmstadt'11, San Diego'14, Vancouver'17, Hong Kong'20), Int. Conf. on Continuous Optimization (Ontario'07, Santiago'10, Lisbon'13, Tokyo'16, Berlin'19).

9.2 PLENARY TALKS[87]

12/2026 **CODEC-FM: Collaborative, Open, and DECentralized training of Foundation Models**, NeurIPS 2026 Workshop, Sydney, Australia

[86] All my talks are listed on https://richtarik.org/i_talks.html

[87] For the purpose of this CV, a plenary talk is any talk not given to a sub-audience; or a talk explicitly labeled as a plenary/keynote talk by the organizers of the workshop/conference. I am excluding here talks at events I organized or co-organized and declined invites to deliver a plenary talk. I am including past talks, and accepted invites to give a talk.

11/2026 **International Conference on Computational Optimization (ICOMP 2026)**, Casablanca, Morocco

09/2026 **1st Conference and Workshop on Mathematics and Artificial Intelligence**, Nazarbayev University, Astana, Kazakhstan

06/2026 **The 9th International Conference on Dynamics of Information Systems (DIS 2026)**, Ústí nad Labem, Czech Republic

05/2026 **ELLIIT Symposium on Optimization for Learning**, Lund, Sweden

02/2026 **Workshop on Learning from Heterogeneous Sources**, Simons Institute, Berkeley, USA

11/2025 **KAUST Workshop on Distributed Training in the Era of Large Models**, KAUST, Thuwal, Saudi Arabia

10/2025 **The 3rd IEEE International Conference on Federated Learning Technologies and Applications (FLTA 2025)**, Dubrovnik, Croatia

09/2025 **10th Workshop on High-Dimensional Approximation (HDA2025)**, Bonn, Germany

08/2025 **International Workshop on Secure and Efficient Federated Learning In Conjunction with ACM AsiaCCS 2025 (FL-AsiaCCS'25)**, Hanoi, Vietnam

06/2025 **3rd Vienna Workshop on Computational Optimization 2025 (VWCO25)**, Vienna, Austria

04/2025 **Rising Stars in AI Symposium**, Thuwal, KAUST, Saudi Arabia

10/2024 **International Conference on Computational Optimization (ICOMP-2024)**, Innopolis, Russian Federation

09/2024 **2nd IEEE International Conference on Federated Learning Technologies and Applications (FLTA 2024)**, Valencia, Spain (virtual)

08/2024 **ALGOPT2024 workshop on Algorithmic Optimization: Tools for AI and Data Science**, Louvain-la-Neuve, Belgium. Celebration of Yurii Nesterov's 50 years long research career in optimization.

06/2024 **Federated Learning for Computer Vision (FedVision) Workshop**, CVPR, Seattle, USA (virtual)

06/2024 **Applied Algorithms for Machine Learning – a Workshop on the Future of Computation**, Paris, France

06/2024 **One World Optimization Seminar in Vienna**, Erwin Schrödinger International Institute for Mathematics and Physics, Vienna, Austria

04/2024 **Workshop on Nonsmooth Optimization and Applications (NOPTA 2024)**, In Honor of the 75th Birthday of Boris Mordukhovich, University of Antwerp, Belgium

02/2024 **Apple Workshop on Privacy Preserving Machine Learning**, Cupertino, California, USA (virtual)

12/2023 **NeurIPS 2023 Workshop on Federated Learning in the Age of Foundation Models**, New Orleans, Louisiana, USA

07/2023 **ICML 2023 Workshop. Federated Learning and Analytics in Practice: Algorithms, Systems, Applications, and Opportunities**, Honolulu, Hawaii

07/2023 **Federated and Collaborative Learning Workshop**, Simons Institute, Berkeley, USA

07/2023 **Mathematics in Armenia: Advances and Perspectives** (80th anniversary of the foundation of the Armenian National Academy of Sciences), Yerevan, Armenia

12/2022 **Optimization in the Big Data Era**, Institute of Mathematical Sciences, National University of Singapore, Singapore, Optimization in the Big Data Era, Institute for Mathematical Sciences, National University of Singapore, Singapore

11/2022 **KAUST Workshop on Scientific Computing and Machine Learning**, KAUST

11/2022 **Google's 2022 Workshop on Federated Learning and Analytics**, virtual

10/2022 **MBZUAI Workshop on Collaborative Learning: From Theory to Practice**, Abu Dhabi (invited by Michael I. Jordan)

09/2022 **CrossFL: Cross-Community Federated Learning: Algorithms, Systems and Co-designs**, workshop associated with the MLSys conference, Santa Clara, USA (virtual)

06/2022 **Mathematics of Complex Data**, KTH Royal Institute of Technology, Stockholm, Sweden

05/2022 **Workshop on Stochastic Numerics, Statistical Learning, Optimization, Approximations, with Applications**, KAUST, Saudi Arabia

04/2022 **Lagrange Workshop on Federated Learning**, Lagrange Mathematics and Computing Research Center, virtual

04/2022 **Apple's Workshop on Privacy Preserving Machine Learning**, virtual

02/2022 **Dagstuhl Seminar**, Theory of Randomized Optimization Heuristics, 3 talks, Germany

12/2021 **NeurIPS 2021 Workshop. New Frontiers in Federated Learning: Privacy, Fairness, Robustness, Personalization and Data Ownership**, Virtual

11/2021 **KAUST-GSAI Joint Workshop on Advances in AI**, Virtual

11/2021 **Google Federated Learning and Analytics Workshop**, Virtual

07/2021 **Optimization Without Borders** (celebration of the 65th Birthday of Yurii Nesterov), Sirius University, Sochi, Russia (virtual)

04/2021 **KAUST Conference on Artificial Intelligence**, 2 keynote talks, Thuwal, Saudi Arabia

08/2020 **Workshop on Privacy Preserving Machine Learning**, Apple, Virtual Workshop

07/2020 **ICML 2020 Workshop: Beyond First Order Methods in ML Systems**, Virtual

06/2020 **Mathematics of Data Science**, Virtual Conference, United Kingdom

10/2019 **School-Conference "Approximation and Data Analysis"**, Nizhny Novgorod, Russia

09/2019 **Workshop on Optimization, Statistics and Numerical Methods**, Moscow Institute of Physics and Technology, Dolgoprudny, Russia (workshop organized around my visit to MIPT)

09/2019 **50 Years of Mathematics in Bielefeld - the (new) Unity of Mathematics**, Bielefeld, Germany

09/2019 **DIMACS Workshop on Randomized Numerical Linear Algebra, Statistics, and Optimization,** Rutgers University, USA

06/2019 **Approximation, Sampling, and Compression in High Dimensional Problems**, Isaac Newton Institute for Mathematical Sciences Program on "Approximation, Sampling and Compression in Data Science", Cambridge University, UK

02/2019 **Numerical Algorithms in Nonsmooth Optimization**, Thematic Program: "Modern Maximal Monotone Operator Theory: From Nonsmooth Optimization to Differential Inclusions", Erwin Schrödinger International Institute for Mathematics and Physics (ESI), Vienna, Austria

11/2018 **Statistics and Data Science Workshop**, KAUST, Thuwal, KSA

09/2018 **Randomized Numerical Linear Algebra and Applications**, Program: Data Science, Simons Institute, Berkeley, USA

08/2018 **DIMACS/TRIPODS Workshop: Optimization in Machine Learning**, Lehigh University, Bethlehem, USA

07/2018 **XII Brazilian Workshop on Continuous Optimization**, Foz do Iguaçu, Brazil

10/2017 **Optimization at Work**[88], Moscow Institute of Physics and Technology, Moscow, Russia

09/2017 **Workshop on Decentralized Machine Learning, Optimization and Privacy**, Lille, France

07/2017 **Workshop on Convex Optimization and Applications**, Fields Institute, Toronto, Canada (in honour of 70th birthday of Arkadi Nemirovski)

04/2017 **Visual Computing - Modeling and Reconstruction**, KAUST, Thuwal, KSA

01/2017 **2017 BASP Frontiers Workshop**, Villars-sur-Ollon, Switzerland

11/2016 **Workshop on Distributed Machine Learning**, Telecom ParisTech, Paris, France

11/2016 **SIAM Warwick Student Chapter Conference on Machine Learning and Statistics,** Coventry, UK

10/2016 **41st Woudschoten Conference,** Zeist, Netherlands. Two keynote lectures in the stream "Numerical methods for big data analytics"

09/2016 **Linear Algebra and Parallel Computing at the Heart of Scientific Computing,** a joint event of the Royal Society of Edinburgh and the French Embassy in London, Edinburgh, UK

[88] This event was organized in my honour.

09/2016 **"OR58": The 58th Annual Conference of the Operational Research Society,** Portsmouth, UK (closing plenary)

06/2016 **2016 Int. Workshop on Modern Optimization and Applications (MOA 2016),** Beijing, China

04/2016 **Einstein Center Mathematical Colloquium "Sparsity: Statistics, Optimization, and Applications"**, Berlin, Germany. "The purpose of this biannual scientific colloquium is bringing together mathematicians, scientists, and engineers to enjoy a series of talks on one topical issue of current or emerging interest to several fields within mathematics."

03/2016 **Computationally and Statistically Efficient Inference for Complex Large-scale Data**, Oberwolfach, Germany

09/2015 **Statistical and Computational Challenges in Large-Scale Data Analysis**, Alan Turing Institute Workshop, Cambridge, UK

09/2015 **LMS Inverse Day: Large-Scale and Nonlinear Inverse Problems**, Edinburgh, UK

04/2015 **Maxwell Institute Probability Day**, Edinburgh, UK

01/2015 **Optimization and Statistical Learning**, Les Houches, France

01/2015 **Theory of Big Data Science**, University College London, UK

12/2014 **Optimization Workshop, Foundations of Computational Mathematics**, Montevideo, Uruguay

11/2014 **46th Conference of Slovak Mathematicians**, Jasná, Slovakia

09/2014 **Mathematical Methods in Economics and Engineering**, Smolenice, Slovakia

07/2014 **Understanding Complex and Large Industrial Data**, Lancaster, UK

05/2014 **9th Int. Conf. on Intelligent Systems: Theories and Applications**, Rabat, Morocco

02/2014 **Stochastic Gradient Methods**, Inst. for Pure and Applied Mathematics, Los Angeles, USA

12/2013 **NeurIPS Workshop on Optimization in Machine Learning**, Lake Tahoe, USA. Past plenary speakers: D. Bertsekas, L. Bottou, S. Wright (2008), N. Srebro, L. Vandenberghe, A. Nemirovski (2009), M. Schmidt, Yu. Nesterov (2010), B. Recht, S. Boyd (2011), P. Parillo, F. Bach (2012)

11/2013 **International Conference on Information Technologies and Society**, Slovenia

10/2013 **Parallel and Distributed Algorithms for Inference and Optimization**, Simons Institute for the Theory of Computing, University of California, Berkeley, USA

05/2013 **Big Data Mining**, Imperial College London, UK

03/2013 **Fête Parisienne in Computation, Inference and Optimization**, IHES, Paris, France

03/2013 **Edinburgh SIAM Student Chapter Conference**, Edinburgh, UK

02/2013 **Big Data and Social Media**, Glasgow, UK

01/2013 **Optimization and Statistical Learning**, Les Houches, France

07/2012 **Optimization in Machine Learning**, ICML workshop, Edinburgh, UK

07/2011 **Optimization Workshop, Foundations of Comp. Mathematics**, Budapest, Hungary

05/2011 **Computational Complexity Challenges in Optimization**, Edinburgh, UK

9.3 INVITED LECTURE SERIES, TUTORIALS & SUMMER SCHOOL COURSES

01/2026 **Federated Optimization Tutorial** (3.5 hours), Bootcamp, Simons Institute Program on Federated and Collaborative Learning, Berkeley, USA

11/2025 **Introduction to Machine Learning 2** (MS course, 28 hours), Dhahran, Saudi Aramco, Saudi Arabia

10/2025 **Introduction to Machine Learning 1** (MS course, 28 hours), Dhahran, Saudi Aramco, Saudi Arabia

07/2025 **The Machine Learning Summer School (MLSS 2025)**, MBour, Senegal

07/2025 **Introduction to Optimization 2** (MS course, 28 hours), Dhahran, Saudi Aramco, Saudi Arabia

06/2025 **Introduction to Optimization 1** (MS course, 28 hours), Dhahran, Saudi Aramco, Saudi Arabia

12/2024 **Optimization for Machine Learning** (three lectures), Applied Mathematics School, KAUST, Saudi Arabia

11/2024 **Optimization for Machine Learning** (five 90 min lectures), Beijing Institute for Mathematical Sciences and Applications (BIMSA), Beijing, China

02/2024 **Optimization for Machine Learning** (three 50 min lectures), AMCS-STAT School, KAUST, Saudi Arabia

03/2024 Machine Learning Summer School, Okinawa, Japan (declined due to a clash with annual leave)

07/2023 Eastern European Machine Learning Summer School (EEML 2023), Košice, Slovakia

06/2023 **Introduction to Machine Learning 2** (MS course, 28 hours), Dhahran, Saudi Aramco, Saudi Arabia

06/2023 **Introduction to Machine Learning 1** (MS course, 28 hours), Dhahran, Saudi Aramco, Saudi Arabia

07/2023 **Eastern European Machine Learning Summer School**, Košice, Slovakia

11/2022 **Introduction to Optimization 2** (MS course, 28 hours), Dhahran, Saudi Aramco, Saudi Arabia

11/2022 **Introduction to Optimization 1** (MS course, 28 hours), Dhahran, Saudi Aramco, Saudi Arabia

06/2022 **Introduction to Stochastic Gradient Descent Methods** (PhD course, 22.5 hours), School of Mathematics, Physics and Informatics, Bratislava, Slovakia

06/2022 **Introduction to Stochastic Gradient Descent Methods** (PhD course, 18 hours), Vienna Graduate School for Computational Optimization (VGSCO), Vienna, Austria

10/2019 **A Guided Walk Through the ZOO of Stochastic Gradient Descent Methods** (Minicourse, 2.5 hours), School-Conference "Approximation and Data Analysis", Nizhny Novgorod, Russia

09/2019 **A Guided Walk Through the ZOO of Stochastic Gradient Descent Methods** (Minicourse, 5 hours), Moscow Institue of Physics and Technology, Dolgoprudny, Russia

08/2019 **A Guided Walk Through the ZOO of Stochastic Gradient Descent Methods** (Summer School Lectures, 6 hours), International Conference on Continuous Optimization (ICCOPT 2019), Berlin, Germany

02/2019 **Randomized Optimization Methods** (PhD Course, 4.5 hours), Erwin Schrödinger International Institute for Mathematics and Physics (ESI), Vienna, Austria

06/2018 **Stochastic Reformulations in Linear Algebra and Optimization** (Summer School, 2 hours), Control, Information and Optimization, Voronovo, Moscow Region, Russia

04/2018 **Introduction to Optimization for Machine Learning** (short outreach course for selected Saudi university students who previously participated in the Saudi National Mathematical Olympiad or IMO, 4.5 hours), KAUST, Thuwal, KSA

08/2017 **Randomized Optimization Methods** (Summer School, 5 hours), Data Science Summer School (DS^3), École Polytechnique, France. Other courses: Joshua Bengio (Montreal), Deep Learning; Pradeep Ravikumar (CMU), Graphical Models; Csaba Szepesvári (Alberta/Google DeepMind), Bandits

10/2015 **Randomized Methods for Big Data: From Linear Systems to Optimization** (Tutorial), IEEE International Conference on Data Science and Advanced Analytics, Paris, France

2015 **Randomized Algorithms for Big Data Optimization** (PhD Course, 18 hours), Graduate School in Systems, Optimization, Control and Networks – Université catholique de Louvain, Belgium

09/2015 **Optimization in Machine Learning** (PhD Course, 8 hours), Machine Learning Thematic Trimester, Toulouse, France

07/2015 **Modern Convex Optimization Methods for Large-Scale Empirical Risk Minimization** (Tutorial, 2 hours, joint with M. Schmidt), ICML 2015, Lille, France

06/2014 **Randomized Coordinate Descent Methods** (PhD Course, 6 hours), Khronos-Persyval Days "High-Dimensional Learning and Optimization", Grenoble, France

06/2014 **Coordinate Descent Methods** (Lecture, 2 hours), NATCOR PhD Course on Convex Optimization, Edinburgh, UK

02/2014 **Gradient Methods for Big Data** (Tutorial, 3 hours), Big Data: Challenges and Applications, Imperial College London, UK

9.4 TALKS @ RESEARCH SEMINARS

2026	University of Vienna
2025	Kempelen Institute of Intelligent Technologies, The Hong Kong Polytechnic University, Federated Learning One World Seminar (virtual), Bielefeld University, KAUST (3)
2024	Tsinghua University, Shanghai Institute for Mathematics and Interdisciplinary Sciences (SIMIS), Peking University, KAUST (2)
2023	CMOR Special Lecture @ Rice University, Qualcomm AI Seminar, Apple, Kempelen Institute of Intelligent Technologies, Slovak Academy of Sciences (2)
2022	Machine Learning NeEDS Mathematical Optimization (virtual), Federated Learning One World Seminar, KAUST (3), Better AI Meetup Bratislava, Hong Kong Baptist University, One World Seminar Series on the Mathematics of Machine Learning (virtual)
2021	University of Tartu (virtual), Portsmouth (virtual), Kempelen Institute for Intelligent Technologies, Comenius University, MBZUAI (virtual), All Russian Seminar on Optimization (virtual), Federated Learning One World Seminar (virtual; 2), KAUST (3)
2020	ESET, Optimization One World Seminar, Montréal MLOpt Seminar
2019	Huawei
2018	Bratislava, KAUST (2), Warwick, Edinburgh (2)
2017	Imperial College London, KAUST, Plymouth, Cardiff
2016	Cambridge, Edinburgh (3), Stanford (2), KAUST, The Alan Turing Institute, LSE, Southampton, Skoltech, Yandex
2015	Louvain, Oxford, IST Austria, UC Davis, UC Berkeley, Edinburgh
2014	Moscow, Paris, Hong Kong, Edinburgh (3)
2013	UC Berkeley, Google, SAS Inc, Louvain, Edinburgh
2012	Wisconsin, Cambridge, Glasgow, Cardiff, Bratislava
2011	Edinburgh, Oxford, London, Heriot-Watt, Louvain
2010	Birmingham, Nottingham, Southampton
2009	ETH Zürich, Linz, Louvain, Edinburgh (2)
2008	Liége, Bratislava
2007	Cornell (2), Louvain (2)

10. TEACHING[89]

KAUST	Fall 2026	Stochastic Gradient Descent Methods (CS 331)
	Fall 2025	Introduction to Machine Learning (DSA 008)
	Fall 2025	Federated Learning (CS 332)
	Fall 2025	Stochastic Gradient Descent Methods (CS 331)
	Fall 2025	CS Graduate Seminar (CS 398)
	Summer 2025	Introduction to Optimization (DSA 211)
	Spring 2025	Stochastic Gradient Descent Methods* (CS 331)
	Spring 2024	Stochastic Gradient Descent Methods* (CS 331)
	Spring 2023	Federated Learning* (CS 332)
	Fall 2022	Stochastic Gradient Descent Methods* (CS 331)
	Spring 2022	Federated Learning* (CS 332)
	Fall 2021	Stochastic Gradient Descent Methods* (CS 331)
	Spring 2021	Federated Learning* (CS 332)
	Fall 2020	Stochastic Gradient Descent Methods* (CS 331)

[89] I have proposed and developed from scratch courses marked with an asterisk. I was the instructor for all courses marked in bold. I was a TA (teaching assistant / tutor) for all other courses.

	Spring 2020	Federated Learning* (CS 390T)
	Spring 2019	Contemporary Topics in Machine Learning* (CS 394D)
	Spring 2018	Contemporary Topics in Machine Learning* (CS 394D)
	Fall 2019	Big Data Optimization* (CS 390FF)
	Fall 2018	Big Data Optimization* (CS 390FF)
	Fall 2017	Big Data Optimization* (CS 390FF)
Edinburgh	Spring 2017	Modern Optimization Methods for Big Data Problems*
	Spring 2016	Modern Optimization Methods for Big Data Problems*
	Fall 2012	Discrete Programming and Game Theory*
	Fall 2011	Discrete Programming and Game Theory*
	Fall 2011	Discrete Programming and Game Theory*
	Spring 2015	Optimization Methods in Finance*
	Spring 2014	Optimization Methods in Finance*
	Spring 2013	Optimization Methods in Finance*
	Spring 2012	Optimization Methods in Finance*
	Spring 2011	Optimization Methods in Finance*
	Fall 2012	Game Theory*
	Fall 2011	Game Theory*
	Fall 2010	Game Theory*
	Spring 2013	Computing and Numerics
	Fall 2010	Dynamic & Integer Programming
	Fall 2010	Mathematics for Chemical Engineers
Louvain	Spring 2009	Nonlinear Optimization (with Yu. Nesterov)
Cornell	Spring 2006	Optimization II/Nonlinear Optimization
	Summer 2005	Engineering Probability and Statistics*
	Fall 2003	Engineering Probability and Statistics
	Summer 2003	Engineering Probability and Statistics
	Spring 2004	Optimization II
	Spring 2005	Application of Game Theory and OR to IT
	Spring 2005	Topics in Linear Optimization
	Fall 2006	Combinatorial Optimization (PhD course taught by David Williamson)
Comenius	Fall 1998	Complex Analysis

11. CONFERENCE, STREAM, WORKSHOP & SEMINAR ORGANIZATION[90]

05/2026	Optimization for Learning Workshop, Lund, Sweden (scientific committee)
11/2025	KAUST Workshop on Distributed Training in the Age of Large Language Models, Thuwal, Saudi Arabia (organizer)
10/2025	The 3rd IEEE International Conference on Federated Learning Technologies and Applications (FLTA 2025), Dubrovnik, Croatia (general chair)
06/2025	The 4th Workshop on Federated Learning for Computer Vision, CVPR 2025 (co-organizer)
07/2024	International Symposium on Mathematical Programming (ISMP) (stream co-organizer with Lin Xiao and Simon Lacoste-Julien)
02/2023	Rising Stars in AI Symposium, KAUST, Thuwal, Saudi Arabia
12/2022	Federated Learning Workshop, NeurIPS
03/2022	Rising Stars in AI Symposium, KAUST, Thuwal, Saudi Arabia
05/2021	SIAM Conference on Optimization, Virtual (member of the organizing committee)
06/2020–now	**Federated Learning One World Seminar (FLOW)**[91] (founder and chair of the organizing committee)

[90] I am excluding organized conference sessions.

[91] https://sites.google.com/view/one-world-seminar-series-flow/home

11/2019	KAUST-Tsinghua-Industry Workshop on Advances in Artificial Intelligence, KAUST, Thuwal, Saudi Arabia
06/2019	Sparse Approximation and Sampling, The Alan Turing Institute, London
04/2019	A Short Course on Deep Learning and the Latest AI Algorithms, KAUST, Saudi Arabia. A 2-day course delivered by Xavier Bresson, NTU, Singapore
07/2018	International Symposium on Mathematical Programming, Bordeaux, France. Scientific Committee Member for stream 4a: "Machine Learning, Big Data, Cloud Computing, and Huge-Scale Optimization" (with A. d'Aspremont, O. Beaumont and S. Sra)
02/2018	Optimization and Big Data 2018, KAUST (co-organizer with M. Canini)
2017–now	All Hands Meetings on Big Data Optimization, KAUST (a weekly group research seminar)
09/2016	IMA Numerical Linear Algebra and Optimization, Birmingham, UK (co-organizing 2 mini-symposia)
12/2015	Mathematical Perspectives on Big Data, a joint meeting of the London and Edinburgh mathematical societies, celebrating 150th anniversary of the former, Edinburgh
12/2015	Theoretical and Computational Approaches to Large-Scale Inverse Problems, Edinburgh (Alan Turing Institute Scoping Workshop)
11/2015	Distributed Machine Learning and Optimization, Edinburgh (Alan Turing Institute Scoping Workshop)
05/2015	Optimization and Big Data 2015, Edinburgh (founder and co-organizer; with Z. Qu)
01/2015	International BASP Frontiers Workshop 2015, Villars-sur-Ollon, Switzerland
12/2014	Workshop: Numerical Algorithms and Intelligent Software, Edinburgh
09/2014	2 minisymposia at 4th IMA Conf. on Numerical Lin. Alg. and Optimisation, Birmingham
05/2014	Coordinate Descent Methods Symposium at the SIAM Conference on Optimization, San Diego (24 speakers)
2014–2017	All Hands Meetings on Big Data Optimization, University of Edinburgh (a weekly inter-disciplinary research seminar attended by faculty, postdocs and PhD students from the Schools of Mathematics, Engineering and Informatics and Heriot-Watt University)
07/2013	Cluster Co-Chair, "Convex and Nonsmooth Optimization" at the International Conference on Continuous Optimization (ICCOPT), Lisbon, Portugal (with F. Glineur). We organized 23 invited sessions in the cluster (=70 speakers). ICCOPT is the premiere conference in continuous optimization, taking place once in 3 years. Our cluster was twice as large as the second largest cluster.
05/2013	Optimization and Big Data 2013, Edinburgh, 64 participants (founder and organizer)
05/2012	Optimization and Big Data 2012, Edinburgh, 62 participants (founder and organizer)
07/2011	2 minisymposia at 3rd IMA Conf. on Numerical Linear Algebra and Optimisation, Birmingham
07/2011	2 minisymposia at 24th Biennial Conf. on Numerical Analysis, Glasgow

12. COMMISSIONS OF TRUST

12.1 EXTERNAL ACTIVITIES

2027	**Senior Area Chair**, ICML
2027	**Area Chair**, AAAI
2027	Scientific Committee Member (Theory Area Lead), KAUST Rising Stars in AI Symposium 2027, Thuwal, Saudi Arabia
2026	Program Committee Member, OPT 2026: Optimization for Machine Learning (NeurIPS 2026 Workshop)
2026	Program Committee Member, International Conference on Computational Optimization (ICOMP 2026)
2026	Reviewer, Swiss National Science Foundation (SNSF) career fellowship
2026	External PhD Examiner for Amir Ali Farzin, Australian National University (advisors: Philipp Braun and Iman Shames)

2026	**Senior Area Chair**, ICML
2026	**Area Chair**, NeurIPS
2026	**Area Chair**, ICLR
2025	**Senior Area Chair**, NeurIPS
2025	**Area Chair**, ICML
2025	**Area Chair**, ICLR
2024	**Distinguished Jury Member**, the AGBA GenAI Innovation Series for evaluating the innovations for 15th Edition of annual Aegis Graham Bell Awards, supported by Ministry of Electronics and Information Technology, Ministry of Education, Government of India, New Delhi and Department of Science & Technology, Government of India, Country Partner Australian Trade and Investment Commission (Austrade)
2024–now	**Action Editor**, Journal of Machine Learning Research (JMLR)
2024	**Area Chair**, NeurIPS
2024	**Area Chair**, ICML
2024	**Area Chair**, ICLR
2023–now	**Associate Editor**, Numerische Mathematik
2023	External PhD Examiner for Lie He, EPFL (advisor: Martin Jaggi)
2023	External PhD Examiner for Othmane Marfoq, Inria Sophia Antipolis (advisor: Giovanni Neglia)
2023	Invited to serve as Area Chair for COLT 2023 (declined)
2023	**Area Chair**, NeurIPS
2023	**Area Chair**, ICML
2023	**Area Chair**, ICLR
2022–2024	**Action Editor**, Transactions on Machine Learning Research (TMLR)
2022	**Area Chair**, NeurIPS
2022	**Area Chair**, ICML
2022	**Area Chair**, ICLR
2021	Habilitation[92] Committee Member for Dr. Aurélien Bellet, Inria Lille - Nord Europe, France (other committee members: Francis Bach, Kamalika Chaudhuri and Catuscia Palamidessi)
2021	**Area Chair**, NeurIPS, virtual
2021	**Area Chair**, ICML, virtual
2021–2022	**Area Editor**[93], Journal of Optimization Theory and Applications
2021	Reviewer of Hi!Paris Fellowship applications in machine learning[94]
2021	Associate Editor (declined invite), Journal of Artificial Intelligence and Machine Learning
2021–now	Research Mentor, Kempelen Institute of Intelligent Technologies, Bratislava, Slovakia
2021	**Senior Program Committee Member**, IJCAI, Montréal, Canada
2021	**Area Chair**, ICLR, Vienna, Austria
2021	Program Committee Member, RSEML 2021: Towards Robust, Secure and Efficient Machine Learning (AAAI 2021 Workshop), virtual
2020	External PhD Examiner for Axel Böhm, University of Vienna (advisor: Radu Ioan Bot)
2020	External PhD Examiner for Dmitry Grishchenko, Université Grenoble Alpes (advisors: Franck Iutzeler, Jérome Malick, and Massih-Reza Amini)
2020	**Area Chair**, NeurIPS, Vancouver, Canada
2020	**Expert Reviewer**, ICML, Vienna, Austria
2020	Program Committee Member, ICML International Workshop on Federated Learning for User Privacy and Data Confidentiality
2020	Evaluator & Reviewer, European Commission H2020 grants
2020	Evaluator & Reviewer, European Commission ICT grants totaling 40+ million EUR

[92] Habilitation á diriger des recherches

[93] area: Optimization for Machine Learning

[94] Hi!Paris is a new interdisciplinary center for research and education on AI and Data Analytics for Science, Business and Society launched by HEC Paris and Institut polytechnique de Paris (IP Paris). See www.hi-paris.fr

2020	Program Committee Member, International Workshop on Federated Learning for User Privacy and Data Confidentiality (IJCAI-PRICAI[95]), Yokohama, Japan
2020	**Senior Program Committee Member**, IJCAI-PRICAI, Yokohama, Japan
2019	Program Committee Member, NeurIPS, Vancouver, Canada
2019	Program Committee Member, AISTATS, Naha, Okinawa, Japan
2019	External PhD Examiner for Benjamin Dubois, École des Ponts, France (advisor: G. Obozinski)
2019–now	**Handling Editor**, Journal of Nonsmooth Analysis and Optimization
2019	**Senior Program Committee Member**, IJCAI, Macao, China
2019	**Area Chair**, ICML, Long Beach, California
2018–now	**Associate Editor**, Optimization Methods and Software
2018	Reviewer, Carnegie Trust, UK
2018	Program Committee Member, NeurIPS, Montreal, Canada
2018	Program Committee Member, ICML, Stockholm, Sweden
2018	Program Committee Member, ICLR, Vancouver, Canada
2017	Program Committee Member, NeurIPS, Long Beach, USA
2017	Program Committee Member, AAAI, New Orleans, USA
2017	Reviewer, ERC (European Research Council) Consolidator Grants
2016	Habilitation Examiner for Nicolas Couellan, Institut de Mathématiques de Toulouse, Université Paul Sabatier, France (other examiners: Jean-Baptiste Hiriart-Urruty (Toulouse))
2016	External PhD Examiner for Igor Colin, Télécom ParisTech, France (other examiners: Alexandre D'Aspremont (ENS) and Mikael Johansson (KTH))
2016	**Guest Editor**, Journal of Computational Mathematics (co-editors: Xiaojun Chen, Yuhong Dai, and Yinyu Ye)
2016	Reviewer, EPSRC Programme Grant Scheme
2016	External PhD Examiner for Hamid Reza Feyzmahdavian, Automatic Control Department, KTH Royal Institute of Technology, Sweden
2016	Program Committee Member, Symposium on Distributed Information Processing, Optimization, and Resource Management over Networks, IEEE Global Conference on Signal and Information Processing, Greater Washington, D.C., USA
2016	Program Committee Member, NeurIPS, Barcelona, Spain
2016	Program Committee Member, ICML, New York, USA
2016	Program Committee Member, International Conference on Internet of Things and Big Data, Rome, Italy
2015	Program Committee Member, AISTATS, San Diego, California
2015	Program Committee Member, 13th EUROPT Workshop on Advances in Continuous Optimization, Edinburgh
2015	Program Committee Member, ICML, Lille, France
2015	External DPhil Examiner for Sheng Fang, Mathematical Institute, University of Oxford, UK (internal examiner: Jared Tanner)
2015	Lead, Alan Turing Institute PhD Programme in Data Science (responsible, on behalf of the University of Edinburgh, for the development of the PhD programme, starting in 2017)
2015	Evaluator & Reviewer, EU Horizon 2020 grants totaling 36.2 million EUR
2015	Reviewer for Leverhulme Trust (2×)
2015	Reviewer for Isaac Newton Trust
2014–2020	**Associate Editor**, Optimization (Frontiers in Applied Mathematics and Statistics)
2014–2017	Steering Committee (representing School of Mathematics), Centre for Doctoral Training in Data Science, University of Edinburgh (£5.03m grant from EPSRC)
2013–2017	Member, EPSRC Peer Review College
2013	Evaluator & Reviewer, EU FP7 grants totaling 42.5 million EUR.
2013	Chief Editor (declined invite), Statistics, Optimization and Computing (SOIC)

[95]International Joint Conference on Artificial Intelligence – Pacific Rim International Conference on Artificial Intelligence

2012–2014	Steering Committee (representing University of Edinburgh), Numerical Algorithms and Intelligent Software (£5m grant from EPSRC)
2011–2017	Reviewer, EPSRC
2011–2016	Faculty Advisor, SIAM Edinburgh Student Chapter

12.2 JOURNAL REVIEWING

Mathematical Programming, SIAM Journal on Optimization, SIAM Review, Foundations of Computational Mathematics, Journal of Machine Learning Research, Machine Learning, IEEE Signal Processing, Symposium on Theory of Computing, Computational Optimization and Applications, Optimization Methods and Software, SIAM Journal on Computing, European Journal of Operational Research, Central European Journal of Operational Research, Journal of Global Optimization.

12.4 SERVICE @ KAUST

2025	PhD Proposal Examiner for Olga Mashkova, Computer Science
2024	PhD Proposal Examiner for Eslam Abdelrahman, Computer Science
2022–2025	**Member, SDAIA-KAUST Center of Excellence in Data Science and AI**
2022–2024	**Founding Member, KAUST AI Initiative**
2022–2024	**Member, AI Initiative Faculty Search Committee**
2022	PhD Proposal Examiner for Fatimah Zohra, Computer Science
2022	MS Thesis Examiner for Fernando Zhapa Camacho, Computer Science
2021–2022	**Member, AI Initiative Advisory Board**
2021	PhD Proposal Examiner for Han Shao, Computer Science
2020–2021	**Chair, Machine Learning Faculty Search Committee**
2020	PhD Thesis Examiner for Adel Bibi, Computer Science (other examiners: Yi Ma (Berkeley), Wolfgang Heidrich (KAUST), Bernard Ghanem (KAUST))
2019–2021	**Member, AI Initiative Committee**
2019–2021	Faculty Sponsor, KAUST ACM Student Chapter
2019–2020	**Chair, Machine Learning Faculty Search Committee**
2019	PhD Proposal Examiner for Adel Bibi, Computer Science
2019	Member, Research Strategic Plan Working Group (representing CEMSE)
2018–2019	**Chair, Artificial Intelligence Committee**[96]
2018–now	**Co-Founder, The Machine Learning Hub** (with M. Canini, B. Ghanem and P. Kalnis)
2018–2019	CS Program Curriculum Committee Member
2018	CS Faculty Search Committee Member, Machine Learning
2017	PhD Proposal Examiner for Khalil Elkhalil, Electrical Engineering
2017–2019	Elected Member of the Academic Council
2017–2018	Faculty Search Committee, Statistics and Computer Science
2017	Directed Research Project Evaluation Panel

12.5 SERVICE @ EDINBURGH

2016	Recruitment Panel, Chancellor's Fellowships in "Mathematics of Data Science" and "Industrial Mathematics"
2016	Internal PhD Examiner for Zhanxing Zhu, School of Informatics, University of Edinburgh (external examiner: Manfred Opper (TU Berlin)
2015	PhD Admissions, Data Science

[96] I led a university-wide committee tasked by the President of KAUST to prepare a document mapping current AI activity at KAUST and suggesting a plan for building the AI initiative at KAUST in the next 5 years; we have written a 100+ page report.

2015	Recruitment Panel, Lectureship in "Mathematics of Data Science"
2014–2015	Part of a small team at Edinburgh assisting with a bid for **The Alan Turing Institute (UK National Data Science and AI Institute)** and subsequently with organizational planning. The bid was successful and University of Edinburgh became one of 5 founding institutions of the Alan Turing Institute (with Oxford, Cambridge, UCL and Warwick).
2013–2016	PhD Admissions, OR & Optimization
2009–2015	Director of Studies and Personal Tutor
2009–2015	MSc Projects Coordinator, OR and Optimization Programme

13. PROFESSIONAL AFFILIATIONS

Association for Computing Machinery (ACM)
Society for Industrial and Applied Mathematics (SIAM)
Mathematical Optimization Society (MOS)
Edinburgh Mathematical Society (EMS)
Isaac Newton Institute for Mathematical Sciences (INIMS)
Institute for Operations Research and Management Science (INFORMS)
Foundations of Computational Mathematics (FoCM)
Slovak Mathematical Society (SMS)

14. INDUSTRY INVOLVEMENT

14.1 INDUSTRY INVOLVEMENT: SUMMARY

company	paper(s)	comment
Yandex Research	[249, 266]	
Sony AI	[240]	
Shanghai AI Lab	[214]	
JD Explore Academy	[196]	
Intel	[95]	
Microsoft Research	[79, 95, 193]	
IBM Research	[22, 78, 158]	
Samsung AI		
Facebook	[83, 187]	
Amazon	[49, 151]	
Google	[51, 52, 168]	co-development of Federated Learning
Barefoot Networks	[95]	
Baidu	[29]	
Western General Hospital	[11]	

In the past I have had research discussions with SAS, Twitter, Arup, British Geological Survey, Confbuzz and Scottish Financial Risk Academy.

14.2 INDUSTRY INVOLVEMENT: FEDERATED LEARNING (with Google)

Standard machine learning approaches require centralizing the training data on one machine or in a data-center. For models trained from user interaction with mobile devices, a new approach was just released by Google, a result of collaboration between Google, Jakub Konečný and myself. The new approach is called "Federated Learning"; it is described in my papers [51, 52] and two additional papers by Google.

Federated Learning enables mobile phones to collaboratively learn a shared prediction model while keeping all the training data on device, decoupling the ability to do machine learning from the need to store the data in the cloud. This goes beyond the use of local models that make predictions on mobile devices by bringing model training to the device as well. **The technology is now in use by around 1 billion Android devices.**

The CEO of Google, Sundar Pichai, said:

> "... we continue to set the pace in machine learning and AI research. We introduced a new technique for training deep neural networks on mobile devices called Federated Learning. This technique enables people to run a shared machine learning model, while keeping the underlying data stored locally on mobile phones."

The new technology is described in a Google Research Blog, dated April 2017, to a lay audience. Selected media coverage: Forbes, The Verge, Quartz, TechRepublic, ZDNet, Computer Business Review, Motherboard Vice, Infoworld, Venturebeat, Engadget, Tech Narratives, GadgetHacks, BGR, AndroidAuthority, AndroidHeadlines, Tom's Guide, Digital Trends, The Exponential View, 9to5google.

14.3. INDUSTRY INVOLVEMENT: YOUTUBE (with Google)

An excerpt from a support letter written to me by David J Harper, the Head of EMEA University Relations, Google Switzerland, for the purpose of a (successful) grant application:

> "Google recognizes the contributions of Dr Richtárik's research to the field of big data optimization. We have invited him to deliver a talk on his research on parallel and distributed coordinate descent methods in our internal Machine Learning seminar. The talk took place in Mountain View, California, in September 2013 and was televised via our teleconference facilities to Google offices around the globe. A variant of the algorithm[97] developed by Dr. Richtárik is in operation at Google in the YouTube recommendation engine."

14.4 INDUSTRY INVOLVEMENT: LLM QUANTIZATION (with Yandex Research)

HIGGS (Hadamard Incoherence with Gaussian MSE-optimal GridS), a data-free method for compressing large language models, was developed in collaboration between Yandex Research, MIT, ISTA and KAUST, and is described in our paper "Pushing the limits of large language model quantization via the linearity theorem" (NAACL 2025). HIGGS requires neither calibration data nor gradient-based optimization, and models can be quantized in minutes directly on a laptop or smartphone, with no significant loss in quality. The method has been applied to Llama 3.1 and 3.2, DeepSeek and Qwen models, and Yandex uses it to prototype and accelerate product development. Yandex announced the method in a press release on 11 April 2025.

15. PUBLICATIONS

15.1 CITATION METRICS[98]

According to Google Scholar, my works attracted more than 30,000 citations, and my `h-index` is 72.

15.2 CONFERENCE/JOURNAL ABBREVIATIONS

NeurIPS	Annual Conference on Neural Information Processing Systems (a leading conference in machine learning and artificial intelligence research)
ICML	International Conference on Machine Learning

[97] A variant of the method developed in [18, 24].

[98] These citations metric were extracted via Google Scholar in September 2025.

	(a leading conference in machine learning and artificial intelligence research)
ICLR	International Conference on Learning Representations
	(a leading conference in machine learning and artificial intelligence research)
AISTATS	International Conference on Artificial Intelligence and Statistics
ALT	International Conference on Algorithmic Learning Theory
AAAI	Conference on Artificial Intelligence
UAI	Uncertainty in Artificial Intelligence
ECAI	European Conference on Artificial Intelligence
NAACL	Annual Conference of the Nations of the Americas Chapter of the ACL
MSML	Mathematical and Scientific Machine Learning
JMLR	Journal of Machine Learning Research
TMLR	Transactions on Machine Learning Research
ECML PKDD	European Conf. on Machine Learning and Principles & Practice of Knowledge Discovery in Databases
DistributedML	International Workshop on Distributed Machine Learning
ICCV	IEEE International Conference on Computer Vision
VMV	Vision, Modeling and Visualization
MLSP	IEEE International Workshop on Machine Learning for Signal Processing
PROMS	Springer Proceedings in Mathematics & Statistics
ICASSP	International Conference on Acoustics, Speech, and Signal Processing
	(world's largest and most comprehensive technical conference focused on signal processing and its applications)
GlobalSIP	IEEE Global Conference on Signal and Information Processing
Allerton	Annual Allerton Conference on Communication, Control, and Computing
SPARS	Proceedings of Signal Processing with Adaptive Sparse Structured Representations
WACV	IEEE Winter Conference on Applications in Computer Vision
SPIE	Proceedings of the Society of Photo-Optical Instrumentation Engineers
OR	Operations Research Proceedings
SIGCOMM	ACM's Special Interest Group on Data Communications, specializing in the field of communication and computer networks
SOSP	Workshop on AI Systems at Symposium on Operating Systems Principles
NSDI	USENIX Symposium on Networked Systems Design and Implementation

15.3 LIST OF PUBLICATIONS, PREPRINTS & TECHNICAL REPORTS

The papers are listed in reverse chronological order in terms of their appearance online. The `arXiv` identifier is mentioned for papers which are not yet published. Coauthors marked with (r), (p), (d), (m) and (i) were my (r)esearch scientists, (p)ostdocs, (d)octoral students, (m)aster students and (i)nterns at the time of writing, respectively.

Prepared in 2026

(334) P. Richtárik and Z. Tovmasyan$^{(m)}$
Frank-Wolfe is approximate broximal gradient descent
`arXiv:2611.02942`

(333) A. Abdikarimova$^{(m)}$, A. Mahran$^{(d)}$, and P. Richtárik
Convergence guarantees for the broximal point method under perturbations
`arXiv:2611.01933`

(332) I. Sokolov[(d)], A. Tyurin, and P. Richtárik
Rennala NSGD: asynchronous stochastic optimization beyond Euclidean geometry
arXiv:2610.38773
NeurIPS 2026

(331) Z. Tovmasyan[(m)], S. Hanzely, E. Shulgin[(d)], P. Richtárik, and S. U. Stich
SCAFFOLD under Hessian similarity: sharp convergence rates
arXiv:2610.35663

(330) E. Shulgin[(d)], S. Laing, A. Orvieto, and P. Richtárik
A quadratic lens on Muon's polar update: benefits, pitfalls, and the role of Newton-Schulz
arXiv:2610.30280
HiLD 2026: 4th Workshop on High-dimensional Learning Dynamics (ICML 2026 Workshop)

(329) H. Li[(d)], Y. Demidovich[(r)], and P. Richtárik
Parallel AI agent collaboration as graph-structured distributed block optimization
arXiv:2610.30074

(328) I. Ilin[(d)]and P. Richtárik
Local work, global progress: a convergence theory of AI agent collaboration
arXiv:2610.28286

(327) A. Gaponov[(m)], G. Malinovsky[(d)], E. Shulgin[(d)], and P. Richtárik
How does Muon work in private deep learning? Scalable differentially private training via orthogonalization
arXiv:2610.24736
OPT2026: 18th Annual Workshop on Optimization for Machine Learning (NeurIPS 2026 Workshop)

(326) I. Ilin[(d)]and P. Richtárik
QK-Wanda: coupling queries and keys for unstructured pruning
arXiv:2610.01554

(325) P. Richtárik and H. Li[(d)]
A sharper theory of ball-proximal optimization: convergence and radius selection
arXiv:2609.35147

(324) P. Richtárik and A. Mahran[(d)]
Local LMO is secretly a projection method!
arXiv:2609.33383

(323) A. Bolatov, E. Shulgin[(d)], D. Li, A. Shtanchaev, S. U. Stich, M. Panov, E. Moulines, P. Richtárik, and M. Takáč
Optimizers for diffusion models: a controlled benchmark
arXiv:2609.23055
DiffuLM: Diffusion Language Models: Foundations, Efficiency, and Reasoning (NeurIPS 2026 Workshop)
BeNTo: Beyond Next Token Prediction (NeurIPS 2026 Workshop)

(322) I. Ilin[(d)], P. Zmushko, and P. Richtárik
Super-Tuning: from activation-aware pruning to sparse fine-tuning
arXiv:2607.09287

(321) L. Yuan, Y. Yang, D. Guo, P. Richtárik, and Z. Lin
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ProxSkip: Yes! Local gradient steps provably lead to communication acceleration! Finally!
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ICLR 2023

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