

Parnian Kassraie

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EMPLOYMENT

Google DeepMind , Research Scientist Member of Gemma Core at GenAI.	Sep 2025 -
Google DeepMind , Student Researcher At the Gemma post-training team, hosted by Olivier Bachem.	Sep - Dec 2024
Apple MLR , Research Intern At the optimization team, hosted by Prof. Marco Cuturi.	Mar - Aug 2024
ETH Zurich , Research Assistant At the Learning and Adaptive Systems Group with Prof. Andreas Krause.	Spring 2020
Technical University of Munich , Research Intern At the Chair for Computer Aided Medical Procedures with Prof. Nassir Navab.	Summers 2017 & 2018

EDUCATION

ETH Zurich Ph.D. in Computer Science Thesis: Learning to Optimize in Structured Environments Advisers: Prof. Andreas Krause and Prof. Peter Bühlmann Committee: Prof. Kevin Jamieson and Prof. Aldo Pacchiano	2021 - 2025
Carnegie Mellon University Visiting Scholar at the Department of Statistics and Data Science Host: Prof. Aaditya Ramdas	Jan - May 2025
ETH Zurich M.Sc. in Computer Science Thesis: Contextual Bandit Optimization with the Neural Tangent Kernel	2019 - 2021
Sharif University of Technology , Tehran, Iran B.Sc. in Electrical Engineering B.Sc. in Computer Science	2014 - 2019

AWARDS

Recipient , Google PhD Fellowship in Machine Intelligence (80,000 CHF anum, article)	2024
Winner , G-research PhD Prize in Mathematics (5,000 CHF, press)	2024
Recipient , ETH Zurich Doc.Mobility Fellowship (8,700 CHF)	2024
Winner , NeurIPS Scholar Award (~2,000 CHF)	2023, 2024
Recipient , ETH Zurich Direct Doctorate Scholarship (22,000 CHF)	2019
Winner , CAMP@TU Munich International Undergraduate Excellence Award (4,500 EUR)	2018
Gold Medalist , 26th Iranian National Physics Olympiad	2013

PUBLICATIONS

A list of publications is also available on my [Google Scholar profile](#).

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| 2025 | LITE: Efficiently Estimating Gaussian Probability of Maximality
Menet N., Hübötter J., Kassraie P. , Krause A. | AISTATS |
| 2024 | Progressive Entropic Optimal Transport Solvers [pdf]
Kassraie, P. , Pooladian A., Klein M., Thornton J., Niles-Weed J., Cuturi M. | NeurIPS |
| | Bandits with Preference Feedback: A Stackelberg Game Perspective [pdf]
Pásztor* B., Kassraie* , P., Krause, A. | NeurIPS |
| 2023 | Instance-Dependent Generalization Bounds via Optimal Transport [pdf]
Hou*, S., Kassraie* , P., Kratsios* A. , Rothfuss* J. and Krause, A. | JMLR |
| | Anytime Model Selection in Linear Bandits [pdf]
Kassraie, P. , Emmenegger N., Krause, A. and Pacchiano A.
Oral at PAC-Bayes Meets Interactive Learning Workshop | NeurIPS |
| | Lifelong Bandit Optimization: No Prior and No Regret [pdf]
Schur*, F., Kassraie* , P., Rothfuss J. and Krause, A. | UAI |
| | Hallucinated Adversarial Control for Conservative Offline Policy Evaluation [pdf]
Rothfuss* J., Sukhija* B., Birchler* T., Kassraie, P. and Krause, A. | UAI |
| 2022 | Graph Neural Network Bandits [pdf]
Kassraie, P. , Krause, A., Bogunovic, I. | NeurIPS |
| | Meta-Learning Hypothesis Spaces for Sequential Decision-making [pdf]
Kassraie, P. , Rothfuss J. and Krause, A. | ICML |
| | Neural Contextual Bandits without Regret [pdf]
Kassraie, P. , and Krause, A. | AISTATS |
| 2017 | Election Vote Share Prediction using Twitter Sentiment Data [pdf]
Kassraie* , P., Modirshanechi*, A. and Aghajan, H. | long oral DATA |

PREPRINTS

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| 2023 | Model-Based Optimization over Large and unbounded Molecular Spaces [pdf]
Wang-Henderson M., Soyuer B., Kassraie, P. , Krause, A., Bogunovic, I.
Presented at workshops SPIGM @ ICML , and AI4D3 @ NeurIPS . | preprint |
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TALKS AND POSTER PRESENTATIONS

For some presentations the links to [p]oster, [s]lides, or [v]ideo are included.

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| | Bandits with Preference Feedback: A Game Theoretic Perspective | |
| 2025 | Overparametrization, Identifiability and Uncertainty in ML , Oberwolfach | invited talk |
| 2024 | NeurIPS, Vancouver [p]
TTIC summer workshop on Adaptive Learning , Chicago [p] | poster
poster |

	Anytime Model Selection in Bandits		
2024	Game-theoretic Statistics Workshop, Oberwolfach [s] ELLIS Workshop on Interactive Learning, Oberwolfach [s] Conference in Mathematical Aspect of Learning Theory, CRM Barcelona	invited talk invited talk poster	
2023	Institute of Mathematical Statistics ICSDS, Lisbon [s] PAC-Bayes Meets Interactive Learning Workshop, Hawaii [s] Royal Statistical Society (RSS) Conference, Harrogate [s] NeurIPS, New Orleans [p, v]	<u>contributed talk</u> <u>oral</u> <u>contributed talk</u> <u>poster</u>	
2022	Meta-Learning for Sequential Decision-making ICML, Baltimore [p, s] Simons Institute's Workshop on Quantifying Uncertainty, UC Berkeley [p] Workshop on Anytime-Valid Inference (SAVI), Eindhoven [p, s] ETH Zurich PhD Lunch Seminar [s]	<u>spotlight</u> <u>poster</u> <u>contributer talk</u> <u>contributed talk</u>	
	Graph Neural Network Bandits		
2023	Workshop on Structured Probabilistic Inference, Hawaii	<u>poster</u>	
2022	NeurIPS, New Orleans [p, s, v]	<u>poster</u>	
	Neural Contextual Bandits without Regret		
2022	International Conference on Artificial Intelligence and Statistics, virtual [p, s, v]	<u>poster</u>	
2021	Master's Thesis Presentation, ETH Zurich [s]	<u>defense</u>	
2019	Understanding Adversarial Attacks by Network Visualization Bachelor's Thesis Presentation, TU Munich [s]	<u>defense</u>	
2017	Election Vote Share Prediction using Twitter Sentiment Data International Conference on Data Science Technologies, Madrid [s]		<u>long oral</u>

TEACHING

Research Supervision

2024	Nicolas Menet. Estimating Probability of Maximality (co-supervised)	<u>now PhD at IBM & ETH</u>
2023	Nicolas Emmenegger. Online Model Selection (student collaborator)	<u>now PhD at MIT</u>
	Miles Wang-Henderson. GNN Bandits for de Novo Molecular Design	<u>now at Terray</u>
	Mikhail Terekhov. Bandit Optimization with Pre-trained Models	<u>now PhD at EPFL</u>
2022	Adrian Müller. Meta-Learning Hypotheses with Infinite Kernels	<u>now PhD at ETH</u>
	Felix Schur. Lifelong Bandit Optimization (co-supervised, ETH Medal)	<u>now PhD at ETH</u>
2021	Kruno Lehman. Function-space VI for BNNs (co-supervised)	<u>now PhD at Meta & ENS</u>
	Deepak Narayanan. Bandits for molecular optimization (co-supervised)	<u>now PhD at ETH</u>

Teaching Assistantship

2025 (S)	Projects in Machine Learning Research (project supervision)	ETH Zurich
2025 (S)	Introduction to Machine Learning (exam design)	
2024 (F)	Probabilistic Artificial Intelligence (head of exam design)	
2023 (F)	Probabilistic Artificial Intelligence (head TA, course with over 800 students)	
2023 (S)	Introduction to Machine Learning (exam design)	
2022 (F)	Probabilistic Artificial Intelligence (tutorials)	
2022 (S)	Introduction to Machine Learning (head of exam design)	
2021 (F)	Probabilistic Artificial Intelligence (exam design)	
2021 (S)	Guarantees in Machine Learning (tutorials, homeworks, projects)	

2018 (F)	Data Analysis (tutorials)	Sharif University
2017 (S)	Signals and Systems (tutorials, exam design)	
2017 (F)	Mathematics of Engineering (tutorials, exam design)	
2016 (F)	Mathematics of Engineering (tutorials, exam design)	

SERVICES & OUTREACH

Organization

- 2025 Two-day workshop: [Two Faces of Optimization](#) workshop at ETH Zurich.
- 2025 One-day workshop: [Exploration in AI Today \(EXAIT\)](#) workshop at ICML.
- 2022 Invited Session: Conformal Prediction Beyond Exchangeability at [ETH FDS](#) seminar.

Reviewing

Journal of Machine Learning Research, Conference on Neural Information Processing Systems (2022 - 2025), International Conference on Machine Learning (2022 [outstanding reviewer](#), 2023), International Conference on Artificial Intelligence and Statistics (2022 [top reviewer](#), 2023 [top reviewer](#), 2025), International Conference on Learning Representations (2024, 2025)

Mentorship

- 2023 Mentoring at [ETH CSNoW](#); Mentorship program for junior female graduate students.
- 2022 Mentoring at [Women in ML](#); Mentorship program for prospective graduate students.