

Karim Abdel Sadek

Website | karimabdel@berkeley.edu | [Linkedin](#)

EDUCATION

University of California, Berkeley

Doctor of Philosophy in Computer Science

Partially supported by the Cooperative AI PhD Fellowship

Berkeley, US

Aug 2025 – Present

University of Amsterdam

MSc in Artificial Intelligence

Relevant Coursework: Machine Learning I, Deep Learning I&II, Game Theory, Computational Social Choice.

GPA: 8.9/10 (Equivalent to 4.0/4.0)

Amsterdam, NL

Sep 2023 – Aug 2025

Georgia Institute of Technology

BSc in Computer Science – Exchange student

Selected by academic merit to participate in the Exchange Program 2022-2023 with a full-ride scholarship.

Coursework: Deep Learning, Information Theory, Quantum Mechanics, Automata and Complexity.

GPA: 4.0/4.0

Atlanta, USA

Jan 2023 – May 2023

Bocconi University

BSc in Mathematics and Computing Sciences for Artificial Intelligence

Thesis: ‘Machine Learning Augmented Algorithms with Reduced Number of Predictions’, grade: 4/4.

Relevant Courses: Real Analysis I, II ,III, Game Theory, Physics I ,II, Advanced Optimization, Decision Theory.

Head Student, Course Representative, Student-Faculty Joint Committees Representative.

GPA: 27.8/30 (Equivalent to 3.8/4.0)

Milan, IT

Sep 2020 – Jul 2023

RESEARCH EXPERIENCE

University of California, Berkeley – Center for Human Compatible AI (CHAI)

Visiting Student Researcher

Working on Human-AI alignment, social choice theory, multi-agent systems, preference learning.

Supervisors: Micah D. Carroll, Anand Siththaranjan

Berkeley, US

Jan 2025 – Jul 2025

University of Cambridge – Krueger AI Safety Lab

Research Intern

Working on RL, Goal Misgeneralization, Unsupervised Environment Design.

ERA Fellowship Recipient.

Supervisors: Michael Dennis, Usman Anwar, David Krueger

Cambridge, UK

Mar 2024 – Dec 2024

Bocconi University, Department of Computing Sciences

Research Intern

First co-author on a paper titled ‘Algorithms for Caching and MTS with a Reduced Number of Predictions’.

Research Area: Theory of Algorithms, ML-augmented algorithms, Online learning.

Paper accepted at ICLR 2024 (Top 2 % of scores).

Supervisor: Prof. Marek Elias

Milan, IT

Jun 2022 – Aug 2023

PUBLICATIONS

- [1] **Karim Abdel Sadek**, Marek Elias. “Algorithms for Caching and MTS with Reduced Number of Predictions.” *International Conference on Learning Representations (ICLR) 2024*. [Paper and Reviews](#)
- [2] Jort Vincenti*, **Karim Abdel Sadek***, Matteo Nulli*, Joan Velja*, Metod Jazbec “Dynamic Vocabulary Pruning in Early-Exit LLMs.” ENLSP Workshop, NeurIPS 2024. [Paper](#)
- [3] **Karim Abdel Sadek**, Nulli M., Velja J., Vincenti J. “Explaining RL Decisions with Trajectories: A Reproducibility Study.” *Transactions on Machine Learning Research (TMLR) 2024*. [Paper](#)
- [4] **Karim Abdel Sadek***, Matthew F. Roberts *, Usman Anwar, Hannah Erlebach, Christian Schroeder De Witt, David Krueger, Michael Dennis. “Mitigating Goal Misgeneralization via Minimax Regret.” *Reinforcement Learning Conference (RLC) 2025*. [Paper](#)

TEACHING

Teaching Assistant

Bocconi University: *Algorithms and Computing Theory*; Prof. Luca Trevisan

Spring 2022

Bocconi University: *Physics I, II*; Prof. Riccardo Zecchina

Fall 2022

Bocconi University: *Probability*; Prof. Sandra Fortini

Spring 2023

INDUSTRY EXPERIENCE

Clearbox.AI

Turin, IT

Machine Learning Intern

Jun 2022 – Aug 2022

Worked on the generation of synthetic data for internal and business purposes. Benchmarked the SDV MIT library against internal privacy metrics. Synthesized tens of datasets using GANs and VAEs.

SCHOLARSHIPS, AWARDS, AND SERVICE

Scholarships and Grants

Cooperative AI PhD Fellowship: Awarded support for the entire duration of my PhD. Full stipend, in addition to travels, compute, and additional benefits ~ \$50,000 / year	2025
Berkeley Existential Risk Initiative – Support for research at CHAI, UC Berkeley – \$30,000	2024
Krueger AI Safety Lab and ERA Fellowship: Research Intern '24 - \$18,000.	2024
Cooperative AI Summer School: Scholarship and Travel Grant - \$1500	2024
Qualcomm Technologies and Ellis Amsterdam: MSc Grant - €2000	2024
University of Amsterdam: MSc Student Travel Grant for ICLR 2024 - €500	2024
AI Grant, University of Amsterdam - €300	2024
Georgia Institute of Technology, full-ride scholarship for exchange semester Spring '23 - ~ \$17,000	2023
Banca di Credito Cooperativo di Brescia: Merit Scholarship for Academic Achievements - €600	2023
Bocconi University: Funding to present the AILAB winning project at Oxford University - €800	2022
Banca di Credito Cooperativo di Brescia: Merit Scholarship for Academic Achievements - €500	2020
AFS Intercultura: AFS Scholarship for Academic Excellence. Covered the cost of my exchange year in Brazil for the academic 2018/2019 - ~€4000	2018
Banca di Credito Cooperativo di Brescia: Merit Scholarship for Academic Achievements - €300	2014

Service – Reviewing

NeurIPS 2024, TMLR, ICLR 2025, RLC 2025

LANGUAGES & SKILLS

Languages: *Italian:* Native; *English:* Advanced, IELTS 8.0; *Portuguese:* C1; *Spanish:* DELE B1

Skills: Proficiency in Python, TensorFlow, PyTorch, JAX

EXTRACURRICULARS

University of Oxford, Bioinformatics Hub Conference Series (July 2022)

- Winner of the AI LAB competition held by Prof. Francesca Buffa regarding breast-cancer detection
- Received funding to travel and present our work at the University of Oxford

Lead The Future Mentorship – Mentee

- Among the few Italian students selected to be mentees, directed to students in STEM, with an acceptance rate < 20%

Associations:

- AI researcher affiliate, *Future of Life Institute*
- (Past) Head of Research at Bocconi Students for Data Science and AI
- (Past) Member at Bocconi Students for Space Developments

Volunteering:

- Teacher Volunteer: Taught math and physics to final-year high-school students in a difficult context in Brazil
- AFS Volunteers: Mentored 60+ students preparing for study-abroad experiences, fostering cultural skills and sensibility