



Azalia Mirhoseini

Assistant Professor of Computer Science

Bio

BIO

Azalia Mirhoseini is an Assistant Professor in the Computer Science Department at Stanford University. Professor Mirhoseini's research interest is in developing capable, reliable, and efficient AI systems for solving high-impact, real-world problems. Her work includes generalized learning-based methods for decision-making problems in systems and chip design, self-improving AI models through interactions with the world, and scalable deep learning optimization. Prior to Stanford, she spent several years in industry AI labs, including Anthropic and Google Brain. At Anthropic, she worked on advancing the capabilities and reliability of large language models. At Google Brain, she co-founded the ML for Systems team, with a focus on automating and optimizing computer systems and chip design. She received her BSc degree in Electrical Engineering from Sharif University of Technology and her PhD in Electrical and Computer Engineering from Rice University. Her work has been recognized through the MIT Technology Review's 35 Under 35 Award, the Best ECE Thesis Award at Rice University, publications in flagship venues such as Nature, and coverage by various media outlets, including MIT Technology Review, IEEE Spectrum, The Verge, The Times, ZDNet, VentureBeat, and WIRED.

ACADEMIC APPOINTMENTS

- Assistant Professor, Computer Science

PROGRAM AFFILIATIONS

- Stanford SystemX Alliance

LINKS

- <http://azaliimirhoseini.com/>: <http://azaliimirhoseini.com/>
- Google Scholar: <https://scholar.google.com/citations?user=I1nZzWsAAAAJ&hl=en&oi=ao>

Teaching

COURSES

2025-26

- Self Improving AI Agents: CS 329A (Aut)

2024-25

- Self Improving AI Agents: CS 329A (Win)
- Systems for Machine Learning: CS 229S (Aut)

2023-24

- Systems for Machine Learning: CS 229S (Aut)

STANFORD ADVISEES

Doctoral Dissertation Reader (AC)

Avanika Narayan, Qizheng Zhang

Orals Evaluator

Avanika Narayan, Zhiqiang Xie

Doctoral Dissertation Advisor (AC)

Jon Saad-Falcon

Master's Program Advisor

Armaan Abraham, Gia Ancone, Sarah Barragan, Gabriel Bo, William Briger, Jett Carruth, Manat Kaur, Brandon Liu, Nora Menon, Sid Potti, Arnub Tandon, Andy Wang, Berk Yalcinkaya, Daniel Yang, Shirley Yu

Doctoral Dissertation Co-Advisor (AC)

Hermann Kumbong, Jacky Kwok, Yuzhen Mao

Doctoral (Program)

Bradley Brown, Simon Guo, Jordan Juravsky, Anne Ouyang, Jon Saad-Falcon

Publications

PUBLICATIONS

- **A Full-Stack Search Technique for Domain Optimized Deep Learning Accelerators**

Zhang, D., Huda, S., Songhori, E., Prabhu, K., Quoc Le, Goldie, A., Mirhoseini, A.
edited by Falsafi, B., Ferdman, M., Lu, S., Weinisch, T.
ASSOC COMPUTING MACHINERY.2022: 27-42

- **A graph placement methodology for fast chip design.** *Nature*

Mirhoseini, A., Goldie, A., Yazgan, M., Jiang, J. W., Songhori, E., Wang, S., Lee, Y., Johnson, E., Pathak, O., Nazi, A., Pak, J., Tong, A., Srinivasa, et al
2021; 594 (7862): 207-212