Mihran Miroyan

 $Berkeley \cdot United\ States\ |\ https://mihranmiroyan.github.io/\ |\ miroyan.mihran@berkeley.edu\ |\ 661-718-7325$

Education

University of California, Berkeley

Aug 2024 -

Ph.D., Computer Science (Sky Computing Lab, Berkeley AI Research)

GPA: 4.00

• Coursework: AI Systems, Natural Language Processing, Large Scale Vision and Language Models, Research in AI Education, Memory Systems in Cognition.

University of California, Berkeley

Aug 2020 - Spring 2024

BA, Computer Science (Honors) and Statistics, High Distinction in General Scholarship

GPA: 3.97

• Coursework: Language Agents in Interaction, Machine Learning, Deep Learning, Computer Vision and Computation Photography, Optimization Models, Linear Modeling, Principles and Techniques of Data Science, Stochastic Processes, Probability Theory, Statistics, Discrete Mathematics, Multivariate Calculus, Linear Algebra, Software Engineering, Database Systems, Data Structures, Computer Architecture.

Publications

- Mihran Miroyan*, Chancharik Mitra*, Rishi Jain, Gireeja Ranade, and Narges Norouzi. Analyzing Pedagogical Quality and Efficiency of LLM Responses with TA Feedback to Live Student Questions. ACM SIGCSE Technical Symposium on Computer Science Education, 2025.
- Chancharik Mitra*, Mihran Miroyan*, Rishi Jain*, Vedant Kumud, Gireeja Ranade, and Narges Norouzi.
 RetLLM-E: Retrieval-Prompt Strategy for Question-Answering on Student Discussion Forums. Proceedings of the AAAI Conference on Artificial Intelligence, EAAI Symposium, 2024.
- Mihran Miroyan*, Shiny Weng, Rahul Shah, Lisa Yan, and Narges Norouzi. EIT: Earnest Insight Toolkit for Evaluating Students' Earnestness in Interactive Lecture Participation Exercises. ACM SIGCSE Technical Symposium on Computer Science Education, 2024.
- Chancharik Mitra*, **Mihran Miroyan***, Rishi Jain*, Vedant Kumud, Gireeja Ranade, and Narges Norouzi. Elevating Learning Experiences: Leveraging Large Language Models as Student-Facing Assistants in Discussion Forums. ACM SIGCSE Technical Symposium on Computer Science Education, 2024.

Work Experience

University of California, Berkeley

January 2023 -

 $Under graduate\ Student\ Instructor$

Berkeley, CA

- Teaching Assistant for the Principles and Techniques of Data Science course (DATA 100). Responsibilities include
 holding discussion sections and office hours.
- Head Teaching Assistant in Summer 2023 and Spring 2024 and Lead Infrastructure Teaching Assistant in Fall 2023.

Instigate Semiconductor (Microchip)

June 2022 – August 2022

RnD Software Engineering Intern

Yerevan, Armenia

• Interned in the FPGA Physical and Logical Design team. Responsibilities included testing and implementing features to the Place and Route Debugger GUI. Worked on the implementation of the hierarchical tree representation of netlists and navigation tools of the debugger.

Awards

High Distinction in General Scholarship (2024)

Outstanding Graduate Student Instructor Award in EECS and Data Science (2024)

Computer Science Honors (2024)

CS Scholars Excellence in Computer Science Award (2024)

Educational Award of the President of the Republic of Armenia in the Sphere of Information Technologies (2019)

Best Student Award at Quantum College (2019)

Organizations and Volunteering

UC Berkeley Chapter of Upsilon Phi Epsilon (international honor society for the Computing Sciences)
The Phi Beta Kappa Society
Computer Science Scholars at UC Berkeley
Armenian Student Association at UC Berkeley
Armenian Red Cross Society

Technical and Other Skills

Languages: English (proficient), Russian (proficient), Armenian (native). Programming Languages: Python (Pandas, NumPy), Java, C, R.

Machine Learning Frameworks: HuggingFace, PyTorch, OpenCV, LangChain, DSPy, FastChat, Azure AI/ML.