# Parsa Hosseini

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## EDUCATION

- **University of Maryland** — College Park, Maryland
  *PhD in Computer Science, GPA: 4.0/4.0* — *Aug 2024 - Present*
- **Sharif University of Technology** — Tehran, Iran
  *Bachelor of Computer Engineering; GPA: 19.03/20* — *Sep 2019 - Feb 2024*

## RESEARCH INTERESTS

- **Spurious Correlation**
- **Multi-modal LLMs**
- **Robust and Reliable LLMs**
- **Interpretability**

## RESEARCH EXPERIENCE

- **Graduate Research Assistant, Reliable AI Lab, University of Maryland** — College Park, Maryland
  *Advisor: Prof. S Feizi* — *Aug 2024 - Present*
  - **Research Topics**: Robustness, Large Language Models
- **Intern, Okinawa Institute of Science and Technology** — Okinawa, Japan
  *Mentors: Dr. M Yamada, Dr. M Sabokrou* — *Jul 2023 - Oct 2023*
  - **Research Topics**: Trustworthy ML, Continual Learning
- **Undergraduate Research Assistant, ML Lab, Sharif University of Technology** — Tehran, Iran
  *Advisor: Prof. MS Baghshah* — *Sep 2022 - Jan 2024*
  - **Research Topics**: Out-Of-Distribution Generalization, Spurious Correlation

## PUBLICATIONS

- **"Seeing What's Not There: Spurious Correlation in Multimodal LLMs"**
  **P Hosseini\***, S Nawathe\*, M Moayeri, S Balasubramanian, S Feizi — *arXiv Preprint*
- **"Structured Reasoning Elicits Robustness in LLMs against Reference Corruption"**
  W Wang, **P Hosseini**, S Feizi — *arXiv Preprint*
- **"Decompose-and-Compose: A Compositional Approach to Mitigating Spurious Correlation"**
  FH Noohdani, **P Hosseini\***, AY Parast\*, HY Araghi, MS Baghshah — *CVPR 2024*

## HONORS, AWARDS, AND TALKS

- [Sep 2024] Dean's Fellowship, Department of Computer Science, University of Maryland
- [Sep 2023] Talk at MLDS Seminar: "Mitigating Spurious Correlation", Okinawa Institute of Science and Technology
- [Sep 2018] Gold medal in Iranian Mathematical Olympiad
- [Sep 2018] Silver medal in Iranian Geometry Olympiad

## VOLUNTEER EXPERIENCE

- **Co-organizing the Workshop on Spurious Correlation and Shortcut Learning**
  *ICLR 2025* — *Apr 2025*
- **Staff at Sharif AI Challenge**
  *A programming competition for all who are interested in artificial intelligence* — *Apr 2021*

## LANGUAGES

- English: Fluent
- Persian: Native
- Japanese: Elementary Proficiency

## TEACHING EXPERIENCE

- **Teaching Assistant**
  *Major Computer Science Courses at UMD and SUT*
  - **Discrete Structures**: Dr. Teli (Fall 2024)
  - **Algorithmic Game Theory**: Dr. Fazli (Spring 2024)
  - **Convex Optimization**: Dr. Jafari (Spring 2023)
  - **Artificial Intelligence**: Dr. Rohban (Spring 2023), Dr. Baghshah (Fall 2022), Dr. Sani (Spring 2022)
  - **Machine Learning**: Dr. Motahari (Spring 2023), Dr. Sharifi-Zarchi (Fall 2022), Dr. Peyvandi (Spring 2022)
  - **Compiler Design**: Dr. Sani (Spring 2023, Fall 2023)
  - **Probability and Statistics**: Dr. Jafari (Spring 2022), Dr. Motahari (Fall 2021), Dr. Sharifi-Zarchi (Fall 2021), Dr. Najafi (Spring 2021)
  - **Data Structure**: Dr. Seddighin (Fall 2021)
- **Private Math Olympiad Teacher**
  *Various High Schools*
  - **Farzanegan High School**: Jun 2021 - Jun 2022
  - **Soltani High School**: Oct 2020 - Dec 2021
  - **Salam Hemmat High School**: Jun 2019 - Sep 2019
  - **Allameh Helli High School**: Apr 2019 - Sep 2019

## Skills Summary

- **Languages**:     Python, JAVA, C, C++, SQL, LaTeX, UNIX Shell Scripting
- **Frameworks**:    PyTorch, TensorFlow, MCP, SLURM
- **Tools**:         GIT, Jupyter, Hugging Face, Virtual Machine, PostgreSQL

## Hobbies and Interests

- Ping Pong!

- 1st Dan in Taekwondo (Martial Arts)