# Parsa Hosseini

Contact: phoseini@umd.edu    Links: Website    LinkedIn    Google Scholar

## 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

- **Multimodal LLMs**
- **LLM Post-Training**
- **Agentic AI and Tool Use**
- **Robustness**

## PUBLICATIONS

*\* denotes equal contribution.*

- **"GHOST: Hallucination-Inducing Image Generation for Multimodal LLMs"**
  *AY Parast\*, **P Hosseini\***, H Asadollahzadeh, AS Moakhar, B Azam, S Feizi, N Akhtar*     *ICLR 2026*
- **"SpurLens: Automatic Detection of Spurious Cues in Multimodal LLMs"**
  ***P Hosseini\**, S Nawathe\*, M Moayeri, S Balasubramanian, S Feizi*     *preprint*
- **"Structured Reasoning Elicits Robustness in LLMs against Reference Corruption"**
  *W Wang\*, **P Hosseini\***, S Feizi*     *preprint*
- **"Your LLM Agents are Temporally Blind"**
  *Y Cheng\*, AS Moakhar\*, C Fan\*, **P Hosseini**, K Faghih, Z Sodagar, W Wang, S Feizi*     *preprint*
- **"Gaming Tool Preferences in Agentic LLMs"**
  *K Faghih\*, W Wang\*, Y Cheng\*, S Bharti, G Sriramanan, S Balasubramanian, **P Hosseini**, S Feizi*     *EMNLP 2025*
- **"Decompose-and-Compose: A Compositional Approach to Mitigating Spurious Correlation"**
  *FH Noohdani, **P Hosseini\***, AY Parast\*, HY Araghi, MS Baghshah*     *CVPR 2024*

## EXPERIENCE

- **Graduate Research Assistant, Reliable AI Lab, University of Maryland** — College Park, Maryland
  *Advisor: Prof. S Feizi* — Aug 2024 - Present
  - **Research Topics**: Multimodal LLMs, Tool Use in Agentic AI
- **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

## HONORS, AWARDS, AND TALKS

- **Dean's Fellowship**, Department of Computer Science, University of Maryland — Sep 2024, 2025
- **Talk**: "Mitigating Spurious Correlation", Okinawa Institute of Science and Technology — Sep 2023
- **Gold medal in Iranian Mathematical Olympiad** — Sep 2018
- **Silver medal in Iranian Geometry Olympiad** — Sep 2018

## SERVICE

- **ICLR Workshop Co-organizer**: Workshop on Spurious Correlation and Shortcut Learning (ICLR 2025)
- **Reviewer**: Major AI Conferences

## SKILLS SUMMARY

- **Programming**: Python, C/C++, UNIX Shell, Java, SQL, LaTeX
- **Machine Learning Frameworks**: PyTorch, TensorFlow, Hugging Face
- **AI/ML Expertise**: Multimodal LLMs, Diffusion Models, CLIP, Robustness, Spurious Correlation
- **Systems & Infrastructure**: MCP, GPU Clusters, SLURM, Virtual Machines, PostgreSQL, Git, Jupyter

## LANGUAGES

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

## TEACHING EXPERIENCE

**Teaching Assistant**     University of Maryland & Sharif University of Technology     2021–2024
*Teaching Assistant for major CS courses including Machine Learning, Artificial Intelligence, Convex Optimization, Compiler Design, Probability & Statistics, and Discrete Structures.*

**Math Olympiad Instructor**     Various High Schools     2019–2024
*Taught problem-solving and competition math to high school students; several achieved top national ranks.*