AMIRHOSSEIN AFSHARRAD

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EDUCATION

Stanford University; Stanford, CA.　　*2022 – Present*
Ph.D., Electrical Engineering.　　GPA: 4.05/4

Stanford University; Stanford, CA.　　*2021 – 2023*
M.Sc., Electrical Engineering.　　GPA: 4.05/4

Sharif University of Technology; Tehran, Iran.　　*2016 – 2021*
B.Sc., Computer Science.　　GPA: 20/20
B.Sc. Electrical Engineering.　　GPA: 19.67/20

SKILLS

Programming Languages: Python, Java, C/C++, Julia, R.

Technical Skills: ML/DL (PyTorch), Computer Vision (OpenCV), Optimization (CVXPY), Robotics (ROS).

Software and Tools: GitHub, MATLAB, LaTeX, Arduino Studio, Hspice, SQL.

Operating Systems: Linux, Windows, macOS.

Languages: English (Fluent), Persian (native), French (basic), Arabic (basic).

HONORS & AWARDS

Recipient of Stanford EE Department Fellowship, Incoming Class of 2021.　　*2021*

Valedictorian (Perfect GPA), CS Department, Sharif University of Technology.　　*2021*

Valedictorian, EE Department, Sharif University of Technology.　　*2020*

Bronze Medalist, 24th National Electrical Engineering Olympiad, Iran.　　*2019*

Ranked 7th, out of ~160,000 undergraduate applicants in the National Universities Entrance Exam, Iran.　　*2016*

National Elites Foundation Fellow & Scholar, Member of 2016 National Elites Cohort, Iran.　　*2016 – 2021*

INDUSTRY EXPERIENCE

AI-Assisted Recruitment & Human-Alignment Research, Part-time Research Scientist at micro1 Research Lab, *Palo Alto, CA*　　*2025*
- Designed RL environments for automated fine-tuning of large reasoning models with domain-specific expertise
- Built custom training datasets and pipelines for major AI labs to optimize fine-tuning of large reasoning models
- Developed LLM-as-a-Judge frameworks to evaluate interviews and align AI interviewers with human judgments
- Conducted end-to-end evaluations of speech-to-text × LLM × text-to-speech pipelines and RLHF bias-mitigation methods, quantifying gains in accuracy, fairness, and latency in automated hiring systems

Design of Agentic Generative AI Systems for Visual Understanding and Reasoning, Part-time Research Scientist at Early-Stage Stealth Startup, *San Francisco, CA*　　*2024-2025*
- Designed and implemented an end-to-end interactive multi-agent system for document understanding, information retrieval, decision making, and report generation via tools such as AutoGen & CrewAI
- Developed vision language models (VLMs) for graph and chart understanding and reasoning
- Developed an agent-based multi-modal RAG systems with visual understanding and reasoning capabilities
- Developed software and hardware-based methods for inference optimization and speedup of LLMs.

Radar/Camera-Based Efficient Computer Vision, ML Engineering Inern at Zadar Labs, *Santa Clara, CA 2024*
- Developed efficient vehicle tracking algorithms on edge devices
- Developed and implemented radar-camera fusion algorithms for long-range vehicle tracking tasks
- Designed and implemented camera-based radar-assisted detection and classification algorithms for edge devices

Real-Time Tracking & Action Detection, ML Intern at Mobile Communication Company of Iran　*2020 – 2021*
- Developed and optimized deep learning models for real-time action detection in video streams, focusing on high-efficiency methods suitable for deployment on limited-resource edge devices.
- Engineered a tracking system to maintain individual identities across frames, adapting to dynamic movements and occlusions, optimized for the constraints of edge computing environments.

ML-Based Advertisement Targeting, Software Engineering Intern at Matab Co., *Tehran, Iran*　　*2019*
- Designed and implemented ML algorithms to analyze activity and statistics on Instagram pages, identifying optimal targets for product advertisements.
- Developed comprehensive Python-based web scraping tools to automatically collect necessary data for algorithmic analysis of Instagram engagement and trends.

LEADERSHIP EXPERIENCE

Grad Student Advisor & Academic Affairs Council Member, EE Dept., Stanford University. *2024 – Present*
- Student advisor to graduate students in the EE dept., providing guidance on academic and research pursuits.
- Member of the Academic Affairs Council, contributing to governance, curriculum design and updates, and academic policy-making within the department.

Financial Officer, Stanford Persian Student Association, Stanford, CA. *2023 – 2024*
- Financial officer and a community leader of the Persian Student Association at Stanford.

Co-founder, Educational Technology Charity Initiative, Tehran, Iran. *2019 – 2022*
- Co-founded initiative to reduce educational disparities by distributing devices to underserved students.

Team Leader, Beautiful Mind Educational Institute, Tehran, Iran. *2016 – 2021*
- Leader of the university entrance exam (konkur) teaching team and educational curriculum designer.

SELECTED PUBLICATIONS

Beyond Binary Preferences: A Principled Framework for Reward Modeling with Ordinal Feedback, **A. Afsharrad**, R. Zhou, L. Viano, S. Lall, & M. Ghavamzadeh. *2026*
The International Conference on Learning Representations 2026 (ICLR 2026)

What Makes a Good Response? Learning Personal Preferences from Interpretable Features, **A. Afsharrad**, E. Soroka, D. O'Neill, & S. Lall. *2026*
The International Conference on Natural Language Processing (ICNLP 2026)

Multi-Agent Stage-wise Conservative Linear Bandits, **A. Afsharrad**, A. Moradipari, & S. Lall. *2025*
The American Control Conference 2026 (ACC26)

LORE: Lagrangian-Optimized Robust Embeddings for Visual Encoders, B. Khodabandeh, A. Afzali, **A. Afsharrad**, S. Mousavi, S. Lall, S. Amini, & S. Moosavi-Dezfooli *2025*
The Conference on Neural Information Processing Systems 2025 (NeurIPS 2025)

Bias-Resilient Preference Optimization: Addressing Content-Aware, Multi-Source Biases in Preference Learning, A. Afzali, **A. Afsharrad**, S. Mousavi, & S. Lall. *2024*
The Reinforcement Learning Conference 2025 (RLC25)

Cooperative Multi-Agent Constrained Stochastic Linear Bandits, **A. Afsharrad**, P. Oftadeh, A. Moradipari, & S.Lall. *2024*
American Control Conference (ACC25)

Generalizable Spacecraft Trajectory Generation via Multimodal Learning with Transformers, D. Celestini, **A. Afsharrad**, D. Gammelli, T. Guffanti, G. Zardini, S. Lall, Elisa Capello, Simone D'Amico, M. Pavone. *2024*
American Control Conference (ACC25)

Convex Methods for Constrained Linear Bandits, **A. Afsharrad**, A. Moradipari, & S. Lall. *2023*
European Control Conference (ECC24)

An Inexpensive and Portable Olfactometer for Event-Related Potential Experiments, H. Hojjati, M. Sedghizadeh, K. Ezzatdoost, **A. Afsharrad**, & H. Aghajan. *2019*
Austria International Biomedical Engineering Conference (AIBEC 2019)

TEACHING EXPERIENCE

Instructor
- **EE263: Introduction to Linear Dynamical Systems**, Stanford University. *Summer 2025*
- **EE263: Introduction to Linear Dynamical Systems**, Stanford University. *Summer 2024*
- **EE263: Introduction to Linear Dynamical Systems**, Stanford University. *Summer 2023*
- **Reinforcement Learning and Applications Workshop**, Sharif University of Technology. *Summer 2023*
- **Machine Learning Theory and Applications**, Sharif University of Technology. *Summer 2021*

Teaching Assistant
- **Courses:** Deep Learning (CS230), Introduction to Linear Dynamical Systems (EE263), Introduction to Machine Learning (EE104), Convex Optimization, Signals and Systems, Computational Neuroscience, Communication Systems, Engineering Mathematics, Fundamentals of Programming in C.

SELECTED COURSES

- CS224R: Deep Reinforcement Learning
- CS231N: Deep Learning for Computer Vision
- CS224N: Natural Language Processing with DL
- CS229: Machine Learning
- EE364A/B: Convex Optimization I/II
- CS265: Randomized Algs and Probabilistic Analysis
- MS&E338: Reinforcement Learning: Frontiers
- EE277: RL: Behaviors & Applications