Reza (Rey) Sanayei

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EDUCATION

University of Arizona

Tucson, AZ

Master of Science in Computer Science, GPA: 4.0/4.0

Expected May 2026

University of Arizona

Tucson, AZ

Bachelor of Science in Computer Science (Honors), GPA: 3.96/4.0

May 2024

- Excellence in Undergraduate Research Award Recipient
- Galileo Circle Scholar (Top 6 among 1,277 CS undergraduates)
- Phi Beta Kappa Membership (Top 5% of class)

Relevant Coursework: Machine Learning, Neural Networks, NLP, Computer Vision, Unix/Linux, Mobile App Development, Information Retrieval, Databases, OS, Algorithms

TECHNICAL SKILLS

Programming Languages: Python, Java, C/C++, SQL, Swift, JavaScript, MATLAB, R, HTML, CSS

Tools & Frameworks: Docker, Git, Bash, MongoDB, REST API, Maven, PyTorch, TensorFlow, Transformers, NumPy

RESEARCH EXPERIENCE

Graduate Research Assistant

Aug 2023 – Present

University of Arizona - Computational Language Understanding Lab

Tucson, AZ

- Proposed frameworks to enhance LLM performance, laying groundwork for future advancements in argument semantics
- Orchestrated ensemble models using language models and text retrieval libraries for diverse hallucination detection

Evaluated LLM performance against state-of-the-art formal Computational Argumentation Theory semantics

- Designed a multilayer model for learning LLM authorship styles to detect machine-generated text
- Authored two first-author papers: one published in SemEval 2024 and one under review at ACL 2025

Undergraduate Research Assistant & Software Developer

Apr 2023 – Feb 2024

University of Arizona - Pauli Lab

Tucson, AZ

- Developed high-throughput phenotyping pipelines for data from the world's largest plant phenotyping robot
- Utilized the university's High-Performance Computing cluster for efficient, distributed data processing
- Designed CNN models for crop-level panicle detection on Field Scanner Data

Professional Experience

Machine Learning Engineering Intern - NLP

May 2023 – Aug 2023

Pido - Fuel Delivery Company

Remote

- Led an NLP project analyzing Persian social media data for traffic insights, optimizing fuel delivery vehicle allocation
- Engineered sentiment analysis and location extraction ML models to enhance fuel allocation strategies

Software Engineering Intern

May 2022 – Aug 2022

Namava - VOD Service with 6M+ users

Remote

- Enhanced backend services and database query efficiency, achieving a 20% reduction in latency
- Integrated third-party payment APIs, streamlining the user subscription process

Teaching Experience

Course Coordinator - Object-Oriented Programming & Design

Aug 2022 – May 2024

University of Arizona, Department of Computer Science

Tucson, AZ

- Trained and supervised 8 TAs, enhancing course delivery and student engagement for over 160 students
- Designed 3 key programming assignments and oversaw a comprehensive 5-week final group project
- Assisted in outreach and interview procedures for new TA hiring, conducting over 200 interviews

Teaching Assistant

Aug 2021 - Aug 2022

University of Arizona, Department of Computer Science

Tucson, AZ

- Conducted detailed grading and provided personalized feedback for programming assignments and exams
- Mentored a cohort of 20 students through weekly office hours, improving their understanding of key course concepts
- Led supplemental instruction sessions focused on development environment setup and exam preparation

LEADERSHIP EXPERIENCE

President, Google Developer Student Club

University of Arizona

Aug 2023 – Present

Tucson, AZ

- Revitalized the chapter, growing active participation from 15 to over 70 members
- Hosted a series of workshops on Google technologies, ML, NLP, Computer Vision, and Android Development

Computer Science Ambassador

Jan 2024 - May 2024

University of Arizona

Tucson, AZ

- Supported outreach to Tucson high schools, sharing insights to encourage interest in Computer Science
- Helped organize the Spring 2024 career fair, guiding student check-in and event navigation
- Developed advertising materials and outreach strategies for the department's recruiting efforts

Projects

Jeopardy! ${\rm Apr}\ 2023$

- Indexed and retrieved data from 280,000 Wikipedia pages with Lucene
- Implemented a QA system using K-means clustering and supervised ranking, achieving 70% accuracy

Wordle Android App

May 2022

Developed a Wordle clone in Java and MySQL for Android, adding leaderboard and replayability features

3D Scene Library

Apr 2022

- Built a C library to create in-memory data structures for 3D scenes using nested structs
- Implemented functions for saving and writing 3D scenes to STL files in text and binary formats