Arya Sadeghi

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Education

University of California- Santa Barbara

Bachelor of Science (B.S.) in Computer Science | GPA: 3.86/4.00

o Relevant Coursework: Data Structures & Algorithms, Linear Algebra, Discrete Mathematics, Probability & Statistics

Experience

Software & IT Support

Simi Valley, CA

June 2025 - Sep 2025

Graduation Date: June 2027

SimiCare Medical Group

o Redesigned and deployed the practice website with responsive layouts and clearer navigation, improving accessibility of resources and scheduling.

- Automated patient communication with email scripts, streamlining reminders and reducing manual staff workload.
- o Authored a troubleshooting guide covering common issues, reducing repeat support requests and enabling staff to resolve problems independently.

Software Engineering Intern

Mammoth Media

Los Angeles, CA June 2023 - Aug 2023

- Collaborated with a 15-member engineering team to refine and ship user-facing features for a high-traffic media platform.
- Enhanced front-end performance and responsiveness by optimizing JavaScript components and streamlining UI workflows.
- Participated in code reviews and agile sprints, improving code quality and aligning feature delivery with product deadlines.

Freelance Tutor

Remote / Los Angeles, CA

Sep 2021 - Present

Self-Employed

- Delivered personalized tutoring in computer science (Python, Java, C++) and mathematics to 30+ clients.
- Supported students in developing practical programming projects and competitive coding skills.

Projects

NBA Fantasy Draft Optimization Tool

Sep 2025

- Engineered an NBA fantasy draft optimizer that analyzes 5 seasons of player data (~3k rows, ~1k players) to deliver real-time draft recommendations.
- Reduced prediction error by 30% compared to using prior-year stats through regression models and Monte Carlo simulations across 1,100 player-seasons.
- o Built an end-to-end pipeline (data cleaning, feature engineering, model training, and simulation) and deployed with a Flask API + React UI for seamless use in live draft scenarios.

MDS and PCA Visualization on the Iris Dataset

May 2024

- Built an interactive visualization tool using Bokeh and Matplotlib to illustrate Multidimensional Scaling (MDS) and Principal Component Analysis (PCA) applied to the Iris dataset.
- o Demonstrated how dimensionality reduction can preserve essential structures, making abstract concepts in multi-variable calculus more tangible.

Leadership & Extracurricular Activities

Robotics Team | UCSB

Jan 2025 - Present

o Decreased decision-making latency of autonomous control algorithms by 30-50 milliseconds by optimizing code, leading to a 15% increase in the autonomous phase score during VEX Robotics competitions.

Skills

Languages: C++, C, Java, Python, JavaScript, R/R Shiny, SQL

Technologies/Frameworks: Git, React, Flask, Pandas, NumPy, scikit-learn, Matplotlib, Bokeh, HTML, CSS