**Arya Sadeghi**
https://github.com/AryaSadeghi21
Email : aryasadeghi@ucsb.edu
Mobile : +1-805-888-1031

## Education

**University of California- Santa Barbara** *Graduation Date: June 2027*
*Bachelor of Science (B.S.) in Computer Science | GPA: 3.86/4.00*

- **Relevant Coursework:** Computer Organization, Linear Algebra, Calculus III, Discrete Mathematics, Probability & Statistics

## Experience

**Software & IT Support** *Simi Valley, CA*
*SimiCare Medical Group* *June 2025 – Present*

- Redesigned and deployed the practice website with responsive layouts and clearer navigation, improving accessibility of resources and scheduling.
- Authored a troubleshooting guide covering common issues, reducing repeat support requests and enabling staff to resolve problems independently.

**Software Engineering Intern** *Los Angeles, CA*
*Mammoth Media* *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*
*Self-Employed* *Sep 2021 – Present*

- 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** *In Progress*

- Predicted player season performance with 30% lower error than using last year's stats, across 1,100 player-seasons.
- Processed 5 seasons of data (~3k rows, ~1k players) and built a live draft tool that updates rankings instantly (<1 ms) after each pick.
- Designed end-to-end pipeline (data cleaning, modeling, and live recommendations) with Flask/React front end for real 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.
- Demonstrated how dimensionality reduction can preserve essential structures, making abstract concepts in multi-variable calculus more tangible.

**Gradient Descent Visualization Tool** *Jan 2024*

- Developed an interactive tool using Python to visualize the principles of gradient descent, including how different learning rates impact convergence on a quadratic function.
- Implemented NumPy for numerical computations and Matplotlib for graphical representation, making the concept accessible for both beginners and experienced individuals in machine learning.

## Leadership & Extracurricular Activities

**Robotics Team | UCSB** *Jan 2025 - Present*

- 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