

Jay Rajesh

<https://www.linkedin.com/in/jay-rajesh-a7628419a> | jrajesh@calpoly.edu | (408)-694-2533

EDUCATION

California Polytechnic State University

Bachelor of Science, Computer Science; GPA: 3.9/4.0

San Luis Obispo, CA

Expected May 2027

Bellarmino College Preparatory

GPA (Unweighted): 3.9/4.0

San Jose, CA

EXPERIENCE

BEACoN Research Scholar | *Python, C++, ROS2, AWS S3*

Nov 2024 – Present

Cal Poly College of Engineering

San Luis Obispo, CA

- Developed a Machine Learning-integrated navigation software for the Clearpath Turtlebot4, enabling joystick control and autonomous movement with ROS2.
- Designed a Deep Learning model in Python to improve the robot's motion accuracy by gathering, pre-processing, and training navigation dataset.
- Used C++ to deploy deep learning model into ROS2 navigation stack, aimed at low-level motion control.
- Utilized AWS S3 to store and manage robotic dataset, ensuring efficiency during model development.

Machine Learning Researcher | *Python, AWS S3*

Sep 2024 – Present

Cal Poly Noyce School of Computing

San Luis Obispo, CA

- Utilized Python to preprocess, extract, and model time-series data from continuous glucose monitors (CGM) for predictive analysis in blood glucose levels.
- Designed and implemented supervised Machine Learning models, including Random Forest and LSTM, to predict glucose levels from activity data, achieving a 16% improvement in prediction accuracy.
- Sourced, cleaned, and validated datasets using AWS S3, optimizing input and storage quality for ML models.

AI Strategy Intern | *Perplexity API*

Jan 2025 – Present

Perplexity

San Francisco, CA

- Selected as 1/500 unique representatives to be Perplexity AI's lone Campus Strategist at Cal Poly SLO.
- Collaborated with 3 Cal Poly organizations to integrate Perplexity's API into 3 distinct generative AI projects.
- Utilized advanced prompt engineering techniques to strategize approaches for Perplexity's regional growth team.
- Conducted 10+ workshops and one-on-one sessions to integrate Perplexity for Educators amongst CS professors.

Co-Founder | *Swift, Node.js, MySQL, AWS Lightsail*

Feb 2023 – Nov 2024

WeClass

San Jose, CA

- Established an EdTech platform for struggling students, successfully implemented in 10+ Bay Area schools.
- Developed and deployed a scalable backend on AWS Lightsail using Node.js and MySQL, optimizing cloud resource allocation for seamless platform operation.
- Built a front-end app interface with Swift, HTML/CSS, and React to enhance user experience and functionality.
- Qualitatively scored and cold-emailed 250 teachers through TeachersPayTeachers, pitching MVP to 15+ educators.

TECHNICAL SKILLS

Languages: Python, Java, C++, JavaScript, HTML/CSS, Swift

Frameworks: ROS2, React, Node.js, Pandas, Scikit-learn

Tools: Git, MySQL, AWS (S3 and Lightsail)