# Arthur Nguyen

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#### EDUCATION

### San Jose State University

San Jose, CA

Bachelor of Science in Computer Science, Minor in Math

Expected Graduation: 2027

#### EXPERIENCE

# Software Engineer Intern/Project Manager

June 2023 – July 2023

XL8

Cupertino, CA

- Developed an AI-powered translation app, cutting translation wait time by 50% for instant conversations.
- Implemented personalized phrase suggestions with a custom OpenAI Model
- Implemented Firestore integration for user profiles and conversation storage
- Led the project from concept to delivery, presenting to the board and starting user testing

## Software Engineer Intern

June 2022 – August 2022

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San Jose, CA

- Built an Object Detection TensorFlow model to classify 100+ songs, storing 700+ pages of music in a database.
- Improved music retrieval speed by 30%, streamlining cataloging efficiency.

## Captain/Programming Lead

Sept. 2020 - May 2024

 $FTC\ Artemis\ Robotics$ 

San Jose, CA

- Developed a pure-pursuit algorithm, boosting autonomous accuracy by 85% in competitions
- Applied advanced algorithms (PID, A\*, MPC), consistently qualifying for State & World Championships
- Designed modular robots, achieving a 93% win rate and back-to-back championship qualifications

#### Founder Content Creator/Mentor

May 2021 – Present

Artemis Robotics Youtube Channel

San Jose, CA

- Created programming tutorials with 160K+ views, supporting 100+ teams in 50+ countries.
- Mentored 75+ students providing global mentorship to Brazil, Portugal, Romania, and Korea teams.

# PROJECTS

## RootedAI | React, Javascript, CSS, Firebase, Node.js, Git, Railway.app

August 2024 – Present

- Developed an AI-powered web app for language learning through interactive prompts and personalized flashcards
- Implemented user authentication with Firebase and integrated data handling using Node.js
- · Utilized Git for version control and collaboration, and deployed the application on Railway.app
- Designed the application's UI with CSS to enhance user experience

## **Self-Driving Car Simulation** | *Python, Pygame, NEAT-Python*

June 2024

- Developed a self-driving car simulation leveraging the NEAT algorithm to evolve neural networks for navigation
- Implemented real-time rendering with Pygame, using sensor data for steering and speed
- Evaluated car performance based on distance traveled without collisions, with customizable simulation parameters

#### TECHNICAL SKILLS

Languages: Java, Python, C/C++, SQL, JavaScript, TypeScript, HTML/CSS, R, Kotlin

Frameworks: React, Node.js, Flask, JUnit, WordPress, Material-UI, FastAPI, Azure, REST API

Developer Tools: Git, Docker, Google Cloud Platform, VS Code, Eclipse, Firebase, Android Studio, Figma, AWS

Libaries: Tensorflow, Pytorch, OpenCV, Pygame, NumPy, Django, Flask, Pandas, Keras, Statsmodels