Gowthaman Aravindan

Singaporean citizen; Eligible for the H1B1 Singapore Visa, which has a separate quota from the limited H-1B pool

Education

National University of Singapore

Expected May 2024

Bachelor of Engineering, Major in Computer Science



Advanced Micro Devices (AMD)

July 2022 - Dec 2022

Software Development Intern

Singapore

- Developed system software applications for AMD's Ryzen / Navi based Accelerated Processing Unit (APU) platforms.
- Implemented test programs, chip characterization and debugging tools that support AMD's agile product development.
- Ensured that the performance and power management benchmark of APU units are conforming to company standards.

PsyFinance March 2022 – July 2022

Software Engineer Intern

Singapore

- Shipped enhancements such as pagination and modals using ReactJS and TypeScript that benefited over 5000 users.
- Optimized front-end performance through centralized state management, reducing page loading times by about 25%.
- Built a Node.JS package with custom functional components for start-ups that want to utilize PsyFinance's option vaults.
- Integrated an analytics tool for monitoring of site traffic and transactions to understand PsyFinance's customer behaviors.
- Added a CI/CD pipeline to automate running of unit tests on pull requests to prevent errors from entering production code.
- Contributed to the launch of V2 app and responded to user feedback by pushing daily ticket fixes and enhancements.
- Created a debugging tool that deserializes JSON data obtained from account keys into a tabulated format for better data visualization.

Bumblebee Autonomous Systems

Aug 2021 - March 2022

Robotics Software Engineer

Singapore

- Designed autonomous underwater and surface vehicles from ground up for research and participation in competitions.
- Developed a simulation environment for DJI drone using Python packages in a Linux based Robot Operating System.
- Conducted biweekly sea trials to evaluate software capabilities in operation that enabled team to attain second place.

Projects

Secand () MongoDB, ExpressJS, ReactJS, NodeJS, Redux, PayPal SDK

• E-commerce platform to sell second-hand items, with features such as cart, product search, checkout, and payment.

Traiflix TypeScript, NextJS, TailwindCSS, Stripe SDK, Firebase

• Video streaming website to watch trailers of popular movies and shows, with payment and user subscription features.

Quizot Python, Telegram API, AWS

• Telegram bot that quizzes players on 101 trivia questions and tracks their progress using game points and rewards.

LiTodo Swift, Core Data

• IOS app that tracks user's to-dos using CRUD persistent storage. Features task priorities and customizable themes.

Technical Skills

Languages: TypeScript, JavaScript, Python, C, C++, Java, HTML, CSS, Latex, Swift

Technologies/Frameworks: NodeJS, ReactJS, NextJS, TailwindCSS, MongoDB, ExpressJS, Redux, Recoil, Core Data

Developer Tools: Git, Linux, NPM, CircleCI, Amplitude, Fathom, Postman, AWS, ROS, Gazebo, Apache

Activities

NUS Faculty of Engineering

Aug 2021 - March 2022

Teaching Assistant

• Guided 20 students in a 12-week robot design course which exposed them to Arduino micro-controller programming.

Seeds of Good Program

Jan 2021 - Aug 2021

Coding Instructor

• Taught programming to 50 primary and secondary school students using interactive web games built using Scratch.

NUS Engineering Club

May 2021 - Aug 2021

Vice Project Director

• Led a team of 12 through the planning and execution of a 2-day orientation camp for over 200 incoming freshmen.