Gowthaman Aravindan

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Education

National University of Singapore

Expected May 2024

Bachelor of Engineering, Major in Computer Science

Experience

Advanced Micro Devices (AMD)

July 2022

Incoming Software Development Intern

Singapore

PsyFinance

March 2022 - Present

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 companies that want to utilize PsyFinance's option vaults.
- Integrated an analytics tool for monitoring website traffic and transactions to understand PsyFinance customer's behaviors.
- Developed a CI/CD pipeline to automate running of unit tests on pull requests, preventing errors from entering production.
- Contributed to the launch of V2 app and responded to user feedback by pushing ticket fixes and enhancements daily.
- Created a debugging tool that descrializes JSON data from a given account key, allowing the team to better respond to user requests.

Bumblebee Autonomous Systems

Aug 2021 - March 2022

Robotics Software Engineer

Singapore

- Designed autonomous underwater and surface vehicles for research and participation in international competitions.
- Developed a simulation environment for DJI drone using Python packages in a Linux based Robot Operating System.
- Conducted weekly 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.

<u>Traiflix</u> | TypeScript, NextJS, TailwindCSS, Stripe SDK, Rest API

• 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.

TesLah | Machine learning, Nerual Networks, JavaScript

• A self-driving car simulation built by implementing driving mechanics, environment, sensors, and collision detection.

Imagify | ReactJS, JavaScript, HTML, CSS

Engine that generates random meme images from a database and allows users to type top/bottom text captions.

Technical Skills

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

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

Developer Tools: Git, Linux, Vercel, Heroku, Postman, AWS, ROS, Gazebo, Apache

Activities

NUS Faculty of Engineering

Aug 2021 - March 2022

Teaching Assistant

• Guided Y1 students in a 12-week robot design course which exposed them to C++ 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.