

Gowthaman Aravindan

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Education

National University of Singapore

Bachelor of Engineering, Major in Computer Science

Expected May 2024

Experience

Advanced Micro Devices (AMD)

Incoming Software Development Intern

July 2022

Singapore

PsyFinance

Software Engineer Intern

March 2022 – Present

Singapore

- Shipped UI enhancements such as pagination and modals using ReactJS and TypeScript that benefited 5000 users.
- Optimized front-end performance through a centralized state management system, reducing loading times by 25%.
- Built a Node.js package with custom functional components for startups that want to utilize PsyFinance's option vaults.
- Integrated an analytics tool for monitoring site traffic and transactions to understand PsyFinance's customer behaviors.
- Developed a CI/CD pipeline to automate running of unit tests on pull requests to prevent 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 deserializes JSON data from a given account key, allowing the team to better respond to user requests.

Bumblebee Autonomous Systems

Robotics Software Engineer

Aug 2021 – March 2022

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.

Traiflix | 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, Neural 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

Teaching Assistant

Aug 2021 – March 2022

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

Seeds of Good Program

Coding Instructor

Jan 2021 – Aug 2021

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

NUS Engineering Club

Vice Project Director

May 2021 – Aug 2021

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