# Gowthaman Aravindan

**>** +65 98366284

■ gowthaman.aravindan@gmail.com
□ GitHub

in LinkedIn

Website



#### National University of Singapore

Expected May 2024

Bachelor of Engineering, Major in Computer Science

Experience

## Advanced Micro Devices (AMD)

July 2022 - Sep 2022

Software Development Intern

Singapore

- Developed system level test programs in Java for AMD's Enterprise chips, supporting their agile product development.
- Used AMD's in house APIs to rescreen tests on rejected chips for debugging and characterizing their firmware failures.
- Improved the USB-check Ruby script such that it ensures the device attached to test stations is a valid storage device.
- Wrote a custom Python script to automate extraction of test results from AMD servers and display them using PowerBI.
- Ran Groovy scripts to automate the online regression of different serial numbers to validate test program's functionality.

**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, Java, Ruby, Groovy C, C++, 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