

Gowthaman Aravindan

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[GitHub](#)

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Education

National University of Singapore

Bachelor of Engineering, Major in Computer Science

Expected May 2024

Experience

Zendesk

Software Engineer Intern (Back-End)

Jan 2023 – May 2023

Singapore

Kinexcs

Software Engineer Intern (Full Stack)

Nov 2022 – Jan 2023

Singapore

- Added custom widgets into mobile application using Flutter and Dart to support the launch of new gamified exercises.
- Integrated a Unity game into Flutter Front-End and enabled cross communication of game protocols and parameters.
- Designed, restructured and maintained DynamoDB and RDS databases (Amazon Web Services) to store game data.
- Built Back-End endpoints using Python (Flask) and utilized Docker containers for end-to-end API testing & verification.
- Developed new calibration method for Bluetooth devices using angles set by the end-user, giving them more flexibility.
- Led weekly scrum meetings, daily standups and onboarded 2 new interns, guiding them through their setup and tasks.

Advanced Micro Devices (AMD)

Software Engineer Intern (Systems)

July 2022 – Oct 2022

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 in order to debug & characterize their firmware failures.
- Improved the USB verification script written in Ruby which ensures storage devices attached to test stations are valid.
- Wrote a Python script to automate the extraction of test results from AMD servers and displayed them using PowerBI.
- Ran Groovy scripts to execute the regression of chips with different serial numbers to evaluate program performance.

PsyFinance

Software Engineer Intern (Front-End)

March 2022 – July 2022

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%.
- Contributed to the launch of V2 app and responded to user feedback by pushing daily ticket fixes and enhancements.
- Integrated an analytics tool for monitoring site traffic & transactions to understand the company's customer behaviors.
- Added a CI/CD pipeline to automate the running of unit tests on pull requests to prevent errors from entering production.
- Built a Node package with custom functional components for companies that want to use the company's option vaults.
- Created a debugging tool that deserializes JSON data from account keys into a tabulated format for better visualization.

Bumblebee Autonomous Systems

Software Engineer Intern (Robotics)

Aug 2021 – March 2022

Singapore

- Designed autonomous underwater vehicles from the ground-up for research purposes & participation in competitions.
- Developed a simulation environment for DJI drone using Python packages in a Linux based Robot Operating System.
- Conducted bi-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, products search, checkout and payment.

Quizot *Python, Telegram API, AWS*

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

LTodo  *Swift, Core Data*

- iOS application that tracks user's to-dos using CRUD persistent storage with task priorities and customizable themes.

Technical Skills

Languages: TypeScript, JavaScript, Python, Dart, SQL, Java, Ruby, Groovy, C, C++, HTML, CSS, Swift

Technologies/Frameworks: NodeJS, ReactJS, PostgreSQL, MongoDB, ExpressJS, Redux, Flask, Flutter, Docker

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