# Gowthaman Aravindan

GitHub

in LinkedIn

Website



#### **National University of Singapore**

**Expected May 2024** 

Bachelor of Engineering, 2<sup>nd</sup> Major in Computer Science

Experience

Google May 2023 – Aug 2023

Incoming Software Engineer Intern

Singapore

Zendesk Jan 2023 – May 2023

Software Engineer Intern (DevOps)

Singapore

- Migrated AWS EC2 development environments to Kubernetes clusters which improved resource utilization and reduced infra costs.
- Integrated **Devspace**, a Kubernetes developer tool, that streamlined interactive development workflows and increased team productivity.
- Successfully deployed new features into production, ensuring a stable release by monitoring **Jenkin** smoke tests and **Datadog** metrics.
- Developed a Slack bot using NodeJS that uses NLP and supervised learning to predict answers based on an existing FAQ database.
- Performed an authentication token rotation for Redis clusters in key microservices as part of companywide secrets revocation program.

Kinexcs Nov 2022 – Jan 2023

Software Engineer Intern (Full Stack)

Singapore

- Designed widgets using Figma and added them into a mobile application using Flutter to support the launch of new gamified exercises.
- Integrated a Unity game into Flutter and and enabled cross communication of game protocols and parameters through Bluetooth plugins.
- Designed, restructured and maintained DynamoDB and RDS databases (Amazon Web Services) to store user stats and game data.
- Built Back-End scripts using Python (Flask) and leveraged Docker containers for end-to-end testing and verification of API endpoints.
- Spearheaded weekly sprint meetings as the scrum master and managed 2 interns by assigning tasks and providing technical guidance.

#### **Advanced Micro Devices (AMD)**

July 2022 - Oct 2022

Software Engineer Intern (Systems)

Singapore

Singapore

- Developed system level test (SLT) programs written in **Java** to emulate the final customer environment of AMD's semiconductors chips.
- Leveraged AMD's in-house APIs to rescreen SLT tests on rejected chips to characterize and isolate the root cause of firmware failures.
- Optimized existing USB verification **Ruby** script which checks if the peripheral device connected to test stations is a valid storage media.
- Wrote a **Python** script to automate the extraction of SLT test results from a backend database and neatly displayed them using **PowerBI**.

• Executed **Groovy** scripts to conduct regression testing of chips with different serial numbers, improving program stability and reliability.

Software Engineer Intern (Front-End)

March 2022 - July 2022

- Shipped UI enhancements such as pagination and modals using **NextJS**, **TypeScript** and **TailwindCSS** that benefited over 5000 users.
- Optimized the front-end performance through centralized state management using Recoil reducing page loading times by about 25%.
- Contributed to the launch of a new company website and responded to user feedback by pushing daily ticket fixes and enhancements.
- Integrated Amplitude, an analytics tool for monitoring statistics such as site traffic and transactions to understand customer behaviors.
- Added a CircleCI, a CI/CD pipeline to automate the running of Jest unit tests on pull requests to prevent bugs from entering production.
- Built an NPM package with React components, providing vendors with an easy-to-use UI library for accessing and utilizing option vaults.
- Created a debugging tool that descrializes JSON data into tables for better visualization, increasing productivity of developers by 50%.

### Projects

**PsvFinance** 

Chatty JavaScript, Telegram API, Heroku

• Telegram bot that leverages OpenAl's language model, ChatGPT to provide informative and contextually relevant responses to queries.

#### LiTodo C Swift, Core Data

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

#### Technical Skills

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

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

Developer Tools: Git, Linux, Vim, Docker, Kubernetes, Postman, AWS, Heroku, Vercel

# Activities

## **NUS Faculty of Engineering**

Aug 2021 - March 2022

• Mentored 50 students in a 12-week long robot design course which exposed them to C++ and Arduino micro-controller programming.