HARSHA KEERTHAN MUTHU KRISHNAN

+65 81134132 · m.harshakeerthan@gmail.com · Portfolio

EXPERIENCE

MediaTek *Full Stack Developer Intern* MEDIATEK *May 2023 - Dec 2023*

- Redesigned intranet websites and integrated SSL encryption using CMS, enhancing user interface and security for chip designers, thereby improving workflow efficiency.
- Established a local version control system and automated CI/CD pipeline, improving synchronization and deployment processes, which significantly improved team collaboration and efficiency.
- Developed Python scripts utilizing RESTful API services to automate content synchronization across Drupal websites, ensuring efficient data updates without redundancy.
- Tech Stack: Python, SQL, PHP, HTML, CSS, JS, Drupal, React, Express & NodeJS, RESTful & JSON API, Agile practices

Continental Automotive *Embedded Software Engineering Intern* Continental *May 2022 - Aug 2022*

- Engineered communication between firmware and sensors by implementing UART interface to reduced failure rates to near zero using Python Scripts.
- Demonstrated to Continental's Business Unit and software was pushed into production and marketed.
- Used 3D motion technology to capture driver's motions as machine learning data. Stored it in mongodb using mqtt.
- Tech Stack: Python, C++, MQTT, CMake, ECal

PROJECTS

PopTrade

- Website developed to facilitate a web-based consumer marketplace for buying/selling products.
- Developed the backend logic using Flask and Python to handle user accounts, product listings, search functionalities.
- Tech Stack: HTML, CSS, JavaScript, Flask, Python, MySQL

Data Analysis

- Analyzed dataset of Bus drivers to compute a safety score by programming on python.
- Represented statistics using data libraries like plotly and dash framework.
- Tech Stack: Python, Dash, plotly

Transport Schedule Program

- Developed a systematic scheduling program with user interface.
- Collaborated with team to produce a scheduling system that simulates a solution for bus bunching.
- Tech Stack: C++

Portfolio Website

- A portfolio website developed using Next.js, Tailwind CSS, and Framer Motion.
- Tech Stack: NextJS, ReactJS, TailwindCSS, Framer Motion, Resend, Vercel

SITAtlas — *In Development*

- Developed a web-based geospatial map to address Singapore Institute of Technology's new campus navigation challenges.
- Implemented a robust deployment pipeline using GitHub Actions to automate application builds and deployments.
- Deployed as a containerized application on DigitalOcean through Docker, ensuring efficient resource utilization and scalability.
- Tech Stack: NextJS, NodeJS, MongoDB, Mapbox, Payload CMS, NGINX, Docker, DigitalOcean

EDUCATION

Singapore Institute of Technology *Sept 2021 - Sept 2024*

B.Eng with Honours in Computer Engineering

Specialisation in Intelligent Transportation Systems (Telematics)

GPA: 4.48 — CGPA: 4.59

SKILLS

Python, C++, Javascript, HTML, CSS, Tailwind CSS, PHP, MySQL, React, Node.js, CMS, NextJS, MongoDB, Docker, NGINX

CERTIFICATIONS

Google Specializations	Data Analytics, IT Automation with Python, IT Support Professional ↗
Cloud	Google Qwiklab Badge: Create and Manage Cloud Resources (GCP & Kubernetes)