HARSHA KEERTHAN MUTHU KRISHNAN

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

EXPERIENCE

MediaTek *Full Stack Developer* MEDIATEK — *8 months — 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 — *4 months — 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. ⬈
- HTML, CSS, JavaScript, Flask, Python

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. Proved as a reliable theoretical case to be used as a real-life application.
- Python, Dash, plotly

MovieStop Database
- Maintained a backend database of movies and implemented queries for users to parse through.
- MySQL, MongoDB, Datagrip

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.
- C++

Portfolio Website
- A portfolio website developed using Next.js, Tailwind CSS, and Framer Motion. ⬈
- NextJS, React, TailwindCSS, Framer Motion, Resend, Vercel

SITAtlas — *In Development*
- Developed a web-based map to address Singapore Institute of Technology's new campus navigation challenges, providing a detailed interactive map for effective real-time orientation. ⬈
- NextJS, NodeJS, MongoDB, Mapbox, Payload CMS, NGINX, Docker, DigitalOcean

EDUCATION

Singapore Institute of Technology
B.Eng with Honours in Computer Engineering
Specialisation in Intelligent Transportation Systems (Telematics) — *Sept 2021 - Sept 2024*
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)
Leadership	Master Class Management: Leadership Management