

HARSHA KEERTHAN MUTHU KRISHNAN

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Availability — Jan 2024 - Dec 2024

EXPERIENCE

MediaTek Full Stack Developer

8 months — May 2023 - Dec 2023

- Developed internal websites and intranet interfaces to streamline communication and track design changes by leveraging Content Management Systems (CMS)
- Created automation scripts to enhance productivity in chip design workflow by utilizing JSON API
- Integrated software expertise to optimize data management and integrated SSL encryption onto websites
- **Tech Stack:** Python, SQL, PHP, HTML, CSS, JS, Drupal, Postman, RESTful & JSON API, React & NodeJS

Continental Automotive Embedded Software Engineering Intern

4 months — May 2022 - Aug 2022

- Engineered communication between firmware and sensors by implementing Universal Asynchronous Receiver-Transceiver (UART) interface to minimize failure rate, close to null using Python Scripts. Demonstrated to Continental's Business Unit and software was pushed into production and marketed
- Used Xsens 3D motion technology to capture vehicle driver's motions and behaviour as machine learning Data. Stored it in mongodb using mqtt communication protocols
- **Tech Stack:** Python, C++, MQTT, CMake, ECal

PROJECTS

Book Store Management

- Designed an Admin portal for CRUD Operations on database and uses REST API to return books details
- [Spring Boot](#), [HTML](#), [CSS](#), [Thymeleaf Templates](#), [REST API](#)

PopTrade

- Website developed to facilitate a web-based consumer marketplace for buying/selling products
- [Flask](#), [HTML](#), [CSS](#), [JavaScript](#)

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 detailed user interface. Collaborated with team to produce a scheduling system that simulates a solution for bus bunching
- [C++](#)

Data Analysis

- Analyzed dataset of Bus drivers to compute a safety score by programming on python. Collaborated with a team to graph charts and designs 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](#)

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 GL JS](#), [Payload CMS](#)

EDUCATION

Singapore Institute of Technology

B.Eng with Honours in Computer Engineering

Specialisation in Intelligent Transportation Systems (Telematics)

[GPA: 4.48](#) — [CGPA: 4.58](#)

Sept 2021 - July 2024

SKILLS

Languages: Python, C, C++, Javascript, HTML, CSS, SCSS, PHP, SQL & NoSQL

Frameworks & Tools: Git & GitHub, XAMPP, React, Node.js, CMS (Drupal & PayloadCMS), NextJS