

SIDDHARTH SRIVASTAVA

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EDUCATION

University of Warwick

MEng Computer Science

September 2020 - Present

Coventry, United Kingdom

- Modules: Functional Programming, Algorithms, Advanced Computer Architecture, Computational Physics, Electrical and Electronic Circuits
- First Class Honours (20/21)

Overseas Family School

International Baccalaureate Diploma

August 2018 - May 2020

Singapore

- 43/45 IB Diploma points (Higher Level Mathematics, Physics, Economics)

EXPERIENCE

American Express

Technology Engineer - Global Commercial Services

June 2022 - August 2022

London

- Collaborated in a group of 6 interns and 3 full time engineers on a software project, following the **Scrum** methodology
- Designed and engineered a micro-services based web application to facilitate data migration between the old FXIP platform to the new Global Pay platform, engineered using **Kotlin**, **Spring Boot**, **React** and **PostgreSQL**
- Implemented containerization using **Docker** to isolate the services and databases into their own containers, facilitating a streamlined deployment to production

Warwick Moto

Mathematical Modelling & Control Systems

November 2020 - Present

University of Warwick

Warwick Moto is a student-led engineering team to build fully-electric race-spec superbike.

- Designed algorithms in **Python** to compute an elevation cycle for the Isle of Man circuit using geographical data and a drive cycle
- Engineered a 3 degree of freedom vehicle model in **Simulink** using the vehicle dynamics blockset to simulate longitudinal and lateral movement of the bike
- Developed an algorithm to convert waypoint data of any racetrack into a steering cycle to simulate the running of a bike on a track
- Programmed a new Electronic Control Unit with two CAN channels based on the Embed E400 Automotive Controller using **Simulink** and **CANalyzer**
- Implemented contactor sequencing to ensure safe startup, state transitions and shut down for the motor and inverter on the bike

Primrose Hill Surgery

Administrator & IT Support

June 2021 - August 2021

London

- Utilized **Pandas** and **NumPy** to perform data analysis on vaccination data at the local vaccination site to enable equitable allocation of funds
- Performed searches on **EMIS** to sort patients based on criterion to provide specialised care
- Operated the NHS e-referral service to refer patients to hospitals for advanced care
- Volunteered at the local vaccination site as a vaccinator to administer over **1000** COVID-19 jabs
- Coordinated the IT response to manage the **Palantir Foundry** vaccine ordering platform and Outcomes for Health Point of Care system to ensure smooth operations

Warwick Engineering Society

Technology Ambassador

November 2021 - June 2022

University of Warwick

- Upgraded the EngSoc PDR progressive web application using **axios** to fetch event data from an API and display it on the home screen, enhancing user experience

PROJECTS

STEMM

JavaScript, Deepgram API

- A Chrome Extension that uses the Deepgram API to control the Chrome browser using voice control
- The project was featured on Deepgram's blog.

SOULFOOD

React Native, Firebase Auth, Cloud Firestore, Axios

- An cross-platform mobile application that pulls recipes from an API and allows users to 'like' recipes to save to their profile

England COVID-19 Dashboard

React Native Chart Kit, Axios

- A cross platform mobile app that pulls data from the UK Government's API and displays graphs showing the latest 6 months of COVID-19 cases and deaths

SKILLS

Languages: Python, Java, HTML, CSS, JavaScript, PHP, SQL, MATLAB, Simulink, Kotlin

Frameworks/Tools: matplotlib, numpy, scipy, pandas, Flask, React, React Native, Beautiful Soup, Tensorflow, Keras