SIDDHARTH SRIVASTAVA

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EDUCATION

Imperial College London   September 2023 - Present
MSc Advanced Computing   *London, United Kingdom*
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University of Warwick   September 2020 - July 2023
MEng Computer Science   *Coventry, United Kingdom*
· Modules: Functional Programming, Algorithms, Advanced Computer Architecture, Computational Physics,
  Electrical and Electronic Circuits, Machine Learning,
· First Class Honours (20/21, 21/22, & 2023, 73.8% overall)

Overseas Family School   August 2018 - May 2020
International Baccalaureate Diploma   *Singapore*
· 43/45 IB Diploma points (Higher Level Mathematics, Physics, Economics)

EXPERIENCE

The Trade Desk   July 2023 - September 2023
Software Engineering Intern - Connected TV Inventory   *London*
The Trade Desk is one of the world's largest demand side platforms powering programmatic advertising.
· Apache Airflow, Apache Spark, Elastic MapReduce, Grafana, C#, Python, Vertica, SQL.

American Express   June 2022 - August 2022
Technology Engineer - Global Commercial Services   *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; built using **Kotlin**, **Spring Boot**, **React**, **PostgreSQL** and **Apache Kafka**;
· Implemented containerization using **Docker** to isolate the services and databases into their own containers, facilitating a stream-
  lined deployment to production.

Warwick Moto   November 2020 - June 2023
Mathematical Modelling & Control Systems Engineer   *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 Automative 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   June 2021 - August 2021
Administrator & IT Support   *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.

PROJECTS

Miyagi   React, Express, MongoDB
CS261 Software Engineering
A full-stack mentoring system developed in a group of 7 students in collaboration with Deutsche Bank
· Developed the mentor-mentee matchmaking system using the **cosine similarity** metric based on expertise of mentors and needs
  of mentees;
· Engineered algorithms to scrape spoofed data from websites using **Beautiful Soup** to insert into our database to act as fake data.

Stëmm   JavaScript, Deepgram API
Hack Cambridge 2022
· A Chrome Extension that uses the Deepgram and Chrome APIs to control the Chrome browser using voice control commands;
· The project was featured on Deepgram's blog.

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