

Ziniu GUO

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EDUCATION

Singapore University of Technology and Design (SUTD)

Singapore
Sep 2020 – Present

- BEng, Computer Science & Design
- Current GPA: 4.50/5.00, expected graduation with Honours (Highest Distinction)
- Focused Track: Full Stack Development
- Selected Coursework: Algorithms, OOP, Comp Structures, Software Design etc.
- Recipient of SM2 Scholarship

PROJECTS

Death Number Prediction under Single COVID-19 Wave

SUTD
Sep – Dec 2021

- Spearheaded the development of a machine learning model in a team of 4 members, using Python NumPy, Pandas and Matplotlib libraries, etc.
- Developed a programme to build machine learning regression algorithms from scratch, which was able to predict the total number of COVID-19-related deaths over the course of a single pandemic wave, given statistics related to a single country

Simulation & Prediction Model of Infectious Disease

SUTD SHARP
Sep – Dec 2021

Advised by Asst. Prof. Ang Yee Sin

- Participated in *SUTD Honours And Research Programme*, a premier honorary programme offered to selected students
- Built an SIR-based model, and used machine learning to process existing data in real life such as infected and death numbers etc., to optimise the model parameters such that existing data could be fitted to the model and future trends could be predicted
- Created a web application platform built with Django as the final product, on which users could feed in data to predict future numbers

Mugr: Digitalization of Collaborative Learning

SUTD
Jan – Apr 2022

- Led a team of 6 members developing an Android app named Mugr which provided an online community for students to study together in groups
- Built the online discussion forum part in Java and Google Firebase Database, and used React Native code push for hot update

CERTIFICATES & AWARDS

Certificate of Excellence: 01.017 SHARP Honour Session 3

SUTD SHARP
Sep – Dec 2021

- Participated in the Honour Session of *SUTD Honours And Research Programme*
- An honour session of mathematical modelling of physical and complex systems, and statistical physics, with a deeper insight into thermodynamics, information theory and finance

Coursera Certificates

Coursera
2020 – 2021

- Kotlin for Java Developers
- HTML, CSS, and JavaScript for Web Developers
- Front-End Web UI Frameworks and Tools: Bootstrap 4
- Front-End Web Development with React
- Introduction to TensorFlow for Artificial Intelligence, Machine Learning, and Deep Learning

SKILLS

- Machine Learning & Math Modelling
- Web Dev: Django, JavaScript, HTML, CSS, ReactJS, FastAPI
- Android Dev: Java, Kotlin, XML, React Native
- Tools and Technologies: Docker, Firebase, Git, Linux, etc.
- Languages: English and Mandarin (Native / Bilingual Proficiency), Spanish (Limited Working Proficiency)