

Brandon Loke

Mobile No.: 81810051 | Email: brandonlokemk@gmail.com

SKILLS

Languages: Proficient in English and Basic Chinese

Programming Skills: Python, JavaScript, Java, C, C++, HTML, CSS, React.JS, Node.JS, Cypress, Android Studio

Digital Skills: Microsoft Office, Microsoft's Power Automate, UiPath

Knowledge in: Data Science, Algorithms, Computer Architecture, Object Oriented Programming, Database Systems, Computer Networking and Software Engineering

EDUCATION

Nanyang Technological University, Singapore
Bachelor of Engineering (Computer Science)

Aug 2020 - July 2024

- Graduated with Honours
- Elective Focus in Artificial Intelligence
- Elective Focus in Data Science and Analytics

Serangoon Junior College

Sep 2017 – Dec

2017

'A' Level Certificate

- A level, Rank Points 78.75

ACADEMIC PROJECT

Nanyang Technological University

Jan 2022 – Apr 2022

WhereToPark Web Application | HTML, CSS, Google Maps API, AWS

- Developed a web application that enables users to locate car parks near their destination
- Integrated Google Maps and Google Places API to accurately display location and information of various car parks
- Leveraged on AWS S3 to perform static website hosting

Nanyang Technological University

Jan 2021 – Apr 2021

Stock Price Prediction using Python and Machine Learning | Python, Alpha Vantage API

- Developed a Python program to produce a prediction model showing future trends in stock prices
- Integrated API from Alpha Vantage to extract latest time series data
- Leveraged on pandas and seaborn libraries to perform data analysis and visualization
- Implemented the Long Short-Term Memory (LSTM) machine learning model to perform forecasting on time series data

Nanyang Technological University

HealthInThisHouse Android Application | Java, Android Studio, Firebase

- Developed an Android Application to encourage users to maintain a healthy lifestyle and keep track of daily calorie intake.
- Leveraged on Google's Firebase for the backend to store a database of different recipes caloric values of various food items
- Developed full frontend functionality using Java in Android Studio

Nanyang Technological University

Osteoporosis Prediction using Machine Learning | Python, PyTorch, Bayesian Optimiser

- Developed a machine learning model trained on Fundus Images to predict Osteoporosis in patients.
- Leveraged on dataset provided from National Healthcare Group Polyclinics (NHGP).
- Employs use of PyTorch library to develop models
- Implemented various models and methods to fine-tune and improve performance.
- Performed ensemble learning to combine models.

CO-CURRICULAR ACTIVITIES

Singapore Scouts Association

Jun 2016 – Aug

2016

Patrol Leader

- Planned meetings and camp activities for freshmen to encourage interaction and bonding throughout multiple camps
- Initiated numerous events within constituency targeted at various age groups

Nanyang Technological University

September 2022 - Present

School of Computer Science and Engineering IT Subcommittee Member | HTML, CSS, JavaScript, React.JS

- Worked on various projects across NTU's SCSE IT Subcommittee, including development of their website's merch store and website migration.
- Focused on the front-end development with the use JavaScript frameworks like React.JS and CSS frameworks like Chakra UI.

WORK EXPERIENCE

Republic Power Pte Ltd

9 Jan 2023 – 26 May 2023

Front End Developer (Intern) | HTML, CSS, JavaScript, Node.JS, React.JS, Python, Cypress, Power Automate, UiPath

- Responsible for automating the user flow for the Fundus Camera using Microsoft's Power Automate, UiPath and Python libraries to process the data that was captured.
- Collaborated with the company's AI engineer to improve image processing algorithms and ensure image quality before further processing.
- Developed back-end processes using Python for image processing in the Fundus Camera automation.
- Gained experience in setting up and working with various IoT products, such as environment sensors, and extracting data from them or their cloud platforms.
- Acquired knowledge of Cypress as a front-end testing framework to perform End-to-End testing on React.JS web applications
- Familiarised myself with MQTT Client and Brokers to set up communication across multiple IoT devices
- Encouraged clear and effective communication across the company with other developers as well as non-technical members
- Adapted quickly to a shift in responsibilities and demonstrated flexibility in a dynamic work environment.
- Demonstrated adaptability, problem-solving abilities, and a willingness to learn in a medical-focused project environment.

HOBBIES & INTERESTS

Travelling, Sports(Tennis, Swimming)