

EDUCATION

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

Aug 2021 – Dec 2024

- Relevant Modules: Data Science and Artificial Intelligence, Algorithm Design and Analysis, Object-Oriented Design Programming and Operating Systems
- Distinction Modules: Data Structure and Algorithm
- Co-curricular activities: SCSE Welfare Subcommittee Member
- Competed in Hack&Roll hackathon in 2023

Singapore Polytechnic, Singapore

Apr 2016 – Apr 2019

Diploma in Infocomm Security Management

- Contested in I'm the Best Coder! Challenge by Shopee in 2019
- Achieved Certified Ethical Hacker (CEH) qualification in 2019
- Achieved Silver for Cyber Defenders Discovery Camp in 2017
- Contested in Gryphon Capture The Flag in 2017

EXPERIENCE

GETGO CARSHARING

May 2022 – Aug 2022

Quality Assurance Engineer (Intern)

- Leveraged TestNG and Appium to automate the GetGo mobile application and implemented test cases in Kotlin for DBS PayLah! and car services extension projects
- Liaised with product managers and CTO with daily scrum meetings to report findings, verifications, and bug resolution
- Reduced workload of software testing by 60% by switching from manual testing to an automated testing environment

AMAZON SINGAPORE

Mar 2019 – Jul 2019

Fulfilment Associate (Part-Time)

- Facilitated basic warehouse inventory systems in stock-taking and inventory controls of 300 items every hour
- Assured accurate dispatch and sorting of 200 customer orders nationwide within an hour with the collaboration of drivers

CRIMSONLOGIC

Apr 2018 – Oct 2018

Quality Assurance Engineer (Temp/Intern)

- Spearheaded the automation of web browser testing through the Selenium framework
- Designed, execute, and maintain test scripts in Java and collaborated with the Software Engineering team to address and resolve these issues
- Demonstrated leadership by driving productivity improvements through the resolution of up to 90% of technical issues in project Fiji, including unresponsive web pages and faulty buttons/links
- Communicated regularly with senior management, presenting weekly updates and insightful reports featuring short summaries and statistical data.

PROJECTS

SOFTWARE ENGINEERING

Flat Resale Price Prediction

- Developed a web application to view resale flat prices and help users to predict prices for selling flats
- As a team leader, assigned tasks based on individual strengths, eliciting and documenting software requirements, creating a Use Case model and contributed in website development
- Employed ReactJs for frontend development, utilised Django for backend operations and integrated with an API for resale flat prices

OBJECT-ORIENTED DESIGN PROGRAMMING PROJECT

MOBLIMA (Movie Booking and Listing Management Application)

- Led the development of a Java application to streamline movie bookings for both customers and cinema staff
- Collaborated closely with a team of 5 members to construct an application applying object-oriented concepts, SOLID design principles, and UML class diagrams
- Initiate the implementation of additional features such as OTP verification via mobile phone or email and password hashing to encrypt user passwords

DATA SCIENCE PROJECT

Reddit (/r/wallstreetbets) Sentiment Analysis

- Conducted a comprehensive examination of subreddit activity, analysing over 50,000 posts to determine its potential for predicting stock price movements
- Sentiment analysis was done utilising VADER and constructed a machine learning model by leveraging Gradient Boosted Tree to address the classification problem
- Model attained a predictive power of 40% for specific market events

SIMPLE WEBSITE PROJECT

TimelessMarket

- Created a stock market search hosted by GitHub Pages and deploy via Heroku and Flash
- Financial data was scraped from the web using BeautifulSoup, and stock quotes, charts, and news were delivered through APIs
- Hosted the Python API application on Heroku and the front end was built with HTML, CSS and JavaScript

FINANCIAL MODELLING

Discounted Cash Flow Model

- Build and modify a discounted cash flow with Excel to deduce a stock's intrinsic value
- Eliminate the manual data entry process by leveraging S&P Capital IQ API to fetch the company's financials and market data
- Employed Oracle Crystal Ball to perform Monte Carlo Simulation on different random variables affecting the valuation of stocks

SKILLS

Programming Languages: Python · Java · Kotlin · HTML/CSS · JavaScript · C · C++

Frameworks: ReactJS · Flask · Django · Next.js

Environment: Windows · Linux/Unix · Kali Linux · MS Windows Server 2008

Database: MySQL · MongoDB