

EMPLOYMENT

Software Engineer **Xlead Sdn Bhd** **Jul 2019 – Dec 2019**

Water Billing Software System

- Reduced Android device's time to render the book's top 20 account list from $O(n^2)$ to $O(n \log n)$ by applying quick sort algorithm.
- Improved Android device's battery lifespan by 10% by implementing GPS logic to stop updates immediately after getting a single update.
- Redesigned Android 5 system to Android 9 with backwards compatibility, from Eclipse to Android Studio.
- Responsible for overseeing the water billing system and resolving clients' queries.
- Leveraged knowledge in Java with Android Studio, VB6, Visual Studio, Battery Historian and MSSQL, MVC.

Graduate Research Assistant **Sunway University** **Feb 2018–Dec 2018**

- Research topic: Robot learning human movements and actions by 'watching' videos.
- Produced a deep learning algorithm that learns complex human motions trained using dataset obtained online.
- Produced scripts to do data pre-processing, and for output demonstration.
- Leveraged knowledge in MATLAB, Python, CNN, LSTM, convLSTM, 2D to 3D reconstruction, Maya, Kinect.

Associate Lecturer **Sunway University** **Jan 2018 – Dec 2018**

- Courses: Programming Principles (C, Python), Artificial Intelligence, Human Computer Interaction (HCI)
- Challenged and motivated students through in-depth discussions, prepared classroom assignments.
- Leveraged knowledge in C, Python, Tobii Eye Tracker, NLP.

EDUCATION

Perth, Australia **Curtin University of Technology** **Jul 2010 – Jun 2014**

- B.S.E. in Electrical Power Engineering. CGPA: 3.68.
- Programming Coursework: Computer Vision, Embedded Systems, Signal Processing

Selangor, Malaysia **Sunway University** **Aug 2018 – Aug 2020**

- Masters by Research in Computer Science.
- Research topic: Time Series Forecasting: A comparison of traditional time series methods and machine learning models
- Leveraged knowledge in MATLAB, Python, R.
- Self-development Coursework: The Web Developer Bootcamp by Colt Steele Udemy, The Complete Web Developer Udemy, Algorithmic Trading & Quantitative Analysis Using Python.

SOFTWARE PROJECTS

Personal Website: https://sjodcre.github.io/oma_web/ (for additional information and projects)

Automated Trading System (Ongoing)

- Advancement of quantitative analysis of financial data using python. Exposure to the Py-Finance Ecosystem.
- Implemented data extraction, fundamental and technical analysis, back testing, and API integration.
- Utilized: JSON, Jupyter, Numpy, pandas, matplotlib, statsmodels, zipline, Quantopian.

Dating Web App

- Developed a web application with Angular 6 with ASP.net Core that allows users to like and chat with others.
- Implemented drag and drop photo upload integrating into a cloud platform (Cloudinary).
- Implemented filtering, sorting and paging of data, persisting data with Entity Framework Core.
- Utilized: Angular 6, .NET Core, TypeScript, Angular forms, Azure, SQLServer, JWT Tokens.

Campground Blog Web App

- Developed a web application with EJS and NodeJs that allows users to post campgrounds information.
- Utilized: EJS, REST API, PassportJs, MongoDB, NodeJs, Git.