

# JERALD YIK JIA LER

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## EDUCATION

**Nanyang Technological University (NTU), Singapore** – Renaissance Engineering Programme (REP) Aug 2017 – Present

- Inter-disciplinary Engineering Education, integrating Engineering, Science, Business, Technology Management & Humanities.
- B.Eng.Sci (with Hons), specializing in Computer Science (GPA 4.83/5.0, 1<sup>st</sup> Class).
- MSc in Technology Management.
- Received Renaissance Engineering Programme Scholarship, awarded to cream of the crop in the cohort.
- Expected Graduation Date: Dec 2021.
- Relevant Courses taken: CZ 2002 Object-Oriented Design & Programming, CE 2005 Operating Systems, EE 6108 Computer Networks, CZ 4062 Computer Security, CZ 4153 Blockchain Technologies.
- Relevant Courses taking this semester: CZ4013 Distributed Systems, CZ4067 Software Security

**University of California, Berkeley (Exchange Programme)**

Aug 2019 – May 2020

- Bachelor of Computer Science. Concurrent with REP during 3<sup>rd</sup> year of studies (GPA 3.486/4.0).
- Relevant Courses taken: CS 170 Efficient Algorithms & Intractable Problems, CS 188 Introduction to Artificial Intelligence, CS 186 Introduction to Database Systems, INFO 159 Natural Language Processing.

**Victoria Junior College, Singapore**

Jan 2013 – Dec 2014

- Graduated with UAS of 87.5/90, with a Distinction in H3 Physics.

## WORK EXPERIENCE

**GovTech, Singapore** – Full-Stack Software Development Intern

May 2020 – Nov 2020

- Concentrated on Next.js for front-end & Koa.js for back-end implementation, while utilising AWS as infrastructure.
- Spearheaded research spike and implementation on the transition of an overhaul of rendering of content, which requires content to be dynamically rendered in the 4 major languages based on language chosen.
- Explored Content Management System (CMS) to facilitate seamless integration of translation content and ease of input & change of content by content creators.

**Rushowl Pte Ltd, Singapore** – Data Analyst Intern

Jun 2019 – Aug 2019

- Established data collection & analysis infrastructure using InfluxDB, Chronograf, OSRM API to estimate elapsed time between bus stops.
- Established data visualization platform using React to deliver to clients a pictorial understanding of statistics of above.
- Configured commercially-viable GSM/GPS module using Raspberry Pi to track live location of buses & send live data to server.

## AWARDS AND ACHIEVEMENTS

**Yitu Hack-Ai-Thon, Singapore** – Finalist (5/100+ teams)

Feb 2019

- Achieved 5<sup>th</sup> place out of 100-odd teams in an image detection model improvement competition by making discerning decisions on which ML models to use and undergoing rigorous quick-searching & trial-and-tested methods.

## PROJECTS

**End-to-End Webpage, Personal Project** (Website: <http://bit.ly/2XR9tyd>, Github Page: <http://bit.ly/39vu40f>)

Dec 2020 - Present

- Provides an interactive interface (with customisable filter options) to output nearby eateries, with login and favouriting functionalities.

**Renaissance Capstone Project, Nanyang Technological University**

Jun 2020 - Present

- Embarked on a Final Year Project, exploring on the topic of Differential Privacy, on a Convolutional Neural Network that utilises peer-to-peer Federated Learning for training.
- Completed Interim Presentation to a panel of course heads.

**Telegram Bot, Personal Project** (Website: <https://bit.ly/39uTaMD>, Github Page: <http://bit.ly/3i9S0Ku>)

Dec 2020

- Includes functionalities to convenience everyday life (e.g. utilise Google Maps Places API to query and parse nearby eateries).

**CodeIT Credit Suisse, Singapore**

Sep 2018, Sep 2020

- Passed the intensive preliminary test among thousands of applicants by clearing coding challenges under time limit.
- Achieved top 20 by spending the full 27 hours of non-stop rigorous coding to clear challenges.

**Data Science Society, University of California, Berkeley**

Sep 2019 – Dec 2019

- Delivered a presentation at Research Symposium to a 1000-strong audience after semester-long critical analyses of large datasets.

**SecondLife, Android Application, Nanyang Technological University** (Github Page: <http://bit.ly/3oJRrRR>)

Sept 2018 – Dec 2018

- Attained an A and top ranking a group by presenting on an Android Application as main deliverable for a school module.

## SKILLS

- **Programming:** Javascript, Python, Typescript, React.js, Next.js, SQL, Java.
- **Soft skills:** Leadership, Presentation skills, Good team player, Passionate & Enthusiastic to learn new skills, Not afraid to make mistakes, Accepting of people from racially-diverse background