

# Herbert Ilhan Tanujaya

✉ mail@herbert.id | 🏠 herbert.id | 📷 donjar

## Education

### National University of Singapore

Singapore

DOUBLE DEGREE STUDENT IN BACHELOR OF COMPUTING (COMPUTER SCIENCE) AND BACHELOR OF SCIENCE (MATHEMATICS)

Aug 2015 - May 2020 (expected)

- Current CAP: 4.58 out of 5 (3.67 out of 4)

## Skills

**Languages** Python, C++, Ruby, SQL, Scala, Bash, C, Java, Rust, R, Clojure, Go

**Web** Ruby on Rails, HTML, HAML, CSS, SCSS, Javascript, Typescript, jQuery, React.js, Redux, Django, Flask, aiohttp

**Mobile** iOS Development with Swift

**Data Science** Scikit-Learn, Keras, Scalding, Kubernetes

## Experience

### Basis AI

Singapore

SOFTWARE ENGINEERING INTERN

May 2019 - Jun 2019; Sep 2019 - Apr 2020

- Helped build the company's MVP web app using aiohttp in Python for backend, as well as React, Redux, and Typescript for frontend.
- Also interfaced with infrastructure tools such as Kubernetes and Helm.

### Jump Trading LLC

Singapore

QUANTITATIVE RESEARCH INTERN

Jun 2018 - Aug 2018; Jul 2019 - Aug 2019

- Compared different machine learning models: linear regression (with regularization), random forests, gradient boosted regression trees (GBRT), and recurrent neural networks (RNN), on financial market data.
- Researched and simulated the impact of trading signals for various markets.

### Bloomberg LP

London

SOFTWARE ENGINEERING INTERN

Aug 2018 - Dec 2018

- Added a scalable backpressure system for the C++ core infrastructure that supports providing live financial data to all clients, involving various internal tools and well-known tools such as Redis.
- Implemented many command-line scripts in Python to automate internal tasks.

### Twitter Inc.

Singapore

DATA SCIENCE INTERN

May 2017 - Aug 2017

- Implemented complex Scalding (MapReduce) jobs to categorize data of traffic coming to Twitter, splitting them based on various variables.
- Presented visualizations of these datasets (in Tableau) to the whole data science team as well as to marketing teams.

### Sea Ltd.

Singapore

SOFTWARE ENGINEERING INTERN

May 2016 - Aug 2016

- Established a data aggregation system for Garena's real-time data to reduce time and memory usage of users' queries.
- Developed an API to assist programmers in obtaining results from the data aggregation system.

## Projects

### Jasmine: Chinese Learning App (<https://github.com/jasmine-team/Jasmine>)

iOS DEVELOPER

Feb 2017 - May 2017

- In a team of four, developed and launched a gamified Chinese learning application using Swift 3.
- Worked on the base game engine as well as 2 minigames that were extended from the game engine.

## Extracurricular Activities

### NUS Hackers (<https://nushackers.org>)

NUS, Singapore

CORETEAM MEMBER

Dec 2016 - Apr 2020

- Hosted weekly technical talks to foster the hacker culture in NUS.
- Played a major part in conducting Hack&Roll 2018, 2019, and 2020, the largest student-run hackathon in Singapore.

### Teaching

NUS, Singapore

- Appointed as the head teaching assistant for CS3217, an advanced software engineering class, in which I rewrote the assignments and the tutorials to keep up with modern iOS practices. I also taught the tutorials and gave feedback to students.
- Designed a one year curriculum for learning Ruby on Rails, and used them to mentor beginners. In a year, some of them progressed from not knowing how to code to successfully building a product.

## Awards

### International Mathematical Olympiad

South Africa and Thailand

BRONZE MEDALIST

2014, 2015

- Won two bronze medals in the International Mathematical Olympiad, the most prestigious high school mathematical competition.