

# Tavish Gobindram

+852 53019235 | tavish.gobindram@gmail.com | tavishg.me

## EDUCATION

### Hong Kong University of Science and Technology

Sept 2015 – May 2019

BEng. **Computer Science**, First Class Honors

- *Awards*: Academic Achievement Medal (Fall '18), Dean's List (Fall '17 & '18), Recruitment Scholarship (Fall '15)
- *Relevant Coursework*: Computer Networks (Graduate), Software Engineering (Honors), Cybersecurity

### University of Waterloo

Jan 2018 – Apr 2018

Exchange Student, Mathematics Dept.

- *Relevant Coursework*: Concurrency & Parallel Programming, Machine Learning

## EXPERIENCE

### Kata.ai, Machine Learning Intern

May 2018 – Aug 2018

- Configured, executed and analyzed over **1k** machine learning experiments using Sacred to optimize model performance
- Implemented Bi-LSTM with Variational and Embedding Dropouts (Gal et al.) in Pytorch
- Developed strong baseline for Indonesian Named Entity Recognition (NER) using Conditional Random Field (CRF)

### Riotly Social Media, Data Science Intern

Jun 2017 – Aug 2017

- Built Random Forest Classifier for identifying fake Instagram accounts with balanced accuracy of **83%**
- Gained experience aggregating crowd-sourced labels from Amazon Mechanical Turk (GLAD, Dawid-Skene, Majority Vote)
- Profiled MongoDB database and sped up queries by **70%** through indexing and splitting collections

### Electronic Engineering Dept. @ HKUST, Undergrad Research Assistant

Feb 2017 – May 2017

- Built Android app and NodeJS + Rosbridge backend to enable remote control of a robotic tour guide

### Grouptap Limited, Android Development Intern

Jun 2016 – Jul 2016

- Developed and designed an Android application to discover social events and chat with event attendees
- Used Volley for network requests, Socket.io for chat and SQLite and device's file storage to manage data

## PROJECTS

### AI Cache – Machine Learning for Content Caching

Sep 2018 – Apr 2019

- Built a caching strategy powered by a machine learning model forecasting content popularity
- AI Cache outperforms LRU (up to 9% relative increase in hit ratio) in all network topologies tested
- **Semi-Finalist** at University-wide Undergraduate Research Competition (HKUST President's Cup)

### FavEx – On-demand Deliveries

Dec 2016 – Jan 2017

- Developed an Android application and supporting NodeJS backend for on-demand deliveries within a university campus
- Awarded **1<sup>st</sup> Place** at University-wide Annual Mobile App Development Contest

### Vii – Your Digital Travel Agent

Oct 2017 – Nov 2017

- Developed a travel agent chatbot with a Java Spring backend using the LINE API, Dialogflow and Clarifai

## VOLUNTEERING

### 180 Degrees Consulting @ HKUST, Project Manager & Consultant

Feb 2016 – Apr 2017

- Led 10 consultants in developing fundraising strategies tailored to high net-worth donor subgroups for Room to Read HK
- Conducted analysis on HK's elderly population and travel industry to develop expansion strategies for Eldpathy, a local NGO

## TECHNICAL SKILLS

**Programming Languages**: Python • C++ • Java

**Data Science/ ML**: Pandas • Matplotlib • Scikit-Learn • Keras • Pytorch

**Misc**: Android • Spring • ReactJS • NodeJS • MongoDB • Elasticsearch • Arduino