# Samuel Ip

ubc science co-or T: 604.822.9677 | F: 604.822.9676 | science.coop@ubc.ca | www.sciencecoop.ubc

CS + Stats Major | samuel.ip@alumni.ubc.ca | Kingpin1111.github.io | (778)-928-0909

# **WORK EXPERIENCE**

### Junior Full Stack Developer, UBC Faculty of Medicine

Aug 2019 - Present

- Developing MVP of Smart Text Analytical Tools(STAT) utilizing NLP to analyze patient needs from patient-doctor conversational data
- Training NLP model to provide sentiment analysis and topic modelling of conversation data
- Implementing full-stack using technologies AngularJS, Flask, PostgreSQL, AWS S3

### Undergraduate Teaching Assistant, UBC Dept. of Statistics

Aug 2019 - Present

- Organize lecture activities for 300+ students for an introductory statistics class (STAT 200)
- Independently administer labs of 30+ students, supervised forums

# Undergraduate Academic Assistant (R&D), UBC Dept. of Statistics

Jun - Aug 2019

- Reduced database capacity by 20+ GB by developing a centralized package to organize all datasets for Data Science courses using R/RStudio
- Initialized migration of UBC's pedagogical database to use the Dataverse API in R/Python

# **PROJECTS**

Badminton Social, <a href="https://badminton-social.firebaseapp.com/">https://badminton-social.firebaseapp.com/</a>

May - Jul 2019

- Built full stack web application using Firebase, JavaScript, Express and React to create a platform for badminton users to share and socialize about recent global badminton events
- Designed front-end using the Material-UI library and persisted user data using React
- Constructed REST API backend and database using Firebase handling user requests and data

#### Prediction Analysis for Kidney Disease, <a href="https://nbviewer.jupyter.org/CKDPredictor">https://nbviewer.jupyter.org/CKDPredictor</a> Mar - Apr 2019

- Trained a classification algorithm (Knn) with 100% prediction accuracy on open source hospital data from India to determine whether new and existing patients have Chronic Kidney disease
- Created a formal report using R and Jupyter to visualize results obtained from classification
- Used modern libraries Dplyr, ggplot, caret, and GGally to clean, model, train and analyze data

# **EDUCATION**

University of British Columbia, Vancouver Canada

Sep 2018 - Present

BSc Computer Science & Statistics | GPA 4.00/4.33 | Dean's Honor List | Expected Graduation 2022

# VOLUNTEER AND COMMUNITY INVOLVEMENT

Volunteer Instructor, Microsoft TEALS Philanthropies, Vancouver, BC

Jun 2019 - Present

- Create lecture modules meeting needs of 20+ indigenous students with limited internet access
- Conduct interactive lab activities using SNAP programming language

# Executive Member, UBC Badminton Club

Sep 2018 - Present

- Help create online forms and spreadsheets to sign/pair up 100+ members for club events
- Create and advertise events engaging more than 1000 people on social media

# TECHNICAL SKILLS

\* Currently Learning

Programming	Frameworks/Libraries	Analytics	Cloud/Database
<ul><li>- JavaScript</li><li>- Java</li><li>- Python*</li></ul>	- React-Redux - Node.js - Flask* - AngularJS*	- R - Jupyter	- Firebase - AWS S3* - Docker* - PostgreSQL*