Ken **Johnson**

Computer Engineering Student at the University of British Columbia
kenjohnson0704@gmail.com • 778-251-9275 • ken-j.ca • github.com/Kojon74 • linkedin.com/in/ken-john/

TECHNICAL SKILLS

Programming: JavaScript, TypeScript, React, Node.js, Python, Keras, TensorFlow, Java, SQL
Software Tools: Git, AWS, Azure, Google Cloud, Firebase, IntelliJ, Visual Studio Code, Unix, CLI

EDUCATION

University of British Columbia | Vancouver, Canada **September 2018 - April 2023**
Bachelor of Applied Science, **Computer Engineering,** Dean's Honour List

WORK EXPERIENCE

TTT Studios | Machine Learning and Data Science Co-op **January 2021 - August 2021**

- Spearheaded the development of the new machine learning department. Created, implemented, and standardized a new design process for future machine learning client projects.
- Developed a PM analytics tool that improved project cost and duration estimates by over 60% and tested the new design process using **Monte Carlo Simulations** in **Python** and **Dash**.
- Drove analysis and client communication throughout the product life cycle as the Lead AI Engineer

KnockNow | Data Science Intern **March 2021 - May 2021**

- Developed a topic model that tagged real estate listings with relevant information using **Latent Dirichlet Allocation** and **Non-negative Matrix Factorization**
- Cleaned a dataset of real estate listing descriptions and created an **SQL database** on **AWS RDS**

Bosch | AI Research Intern **June 2020 - December 2020**

- Explored a method of video classification using **human pose estimation** and **neural networks** with **Keras**
- Tested on a skateboard trick classification problem where it performed slightly better than traditional CNNs and trained within 60% of the time
- Trained a generalized AI agent to play drop-down games such as Tetris and Puyo using **reinforcement learning**

EXTRACURRICULARS

Clearo Skin Care Mobile App | Founder & Developer **March 2021 - Present**

- Designed, developed, and published a skin care mobile application to helps users determine potential acne triggers
- Created the design with **Figma**, front-end with **React Native** and **TypeScript**, authentication and database management with **Firebase**, testing with **Jest**, and published using **Expo**
- Contributed to the **open-sourced** library wix/react-native-calendars by implementing a sliding calendar feature
- Published to the **Apple App Store** where it currently has 234 downloads and a 5 star rating

UBC Computer Science - Machine Learning & Data Mining | Teaching Assistant **September 2021 - Present**

- Taught machine learning concepts such as regularization, principle component analysis, and recommender systems
- Facilitated office hours and debug sessions in **Python**, using **Numpy**, **Pandas**, **Scikit-learn**, and **TensorFlow**

UBC Uncrewed Aircraft Systems | Software Developer **August 2019 - August 2021**

- Implemented a **simmulated annealing algorithm** to find the shortest path between 15+ waypoints for our drone to autonomously navigate through
- Developed the front-end interface for the algorithm in **React**, and the back-end in **Django** with the system in a **Docker** container