

Hi, I'm DAVID DING

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SUMMARY OF QUALIFICATIONS

Proficient with **Python**, working knowledge in **C**, and **Java**
Working knowledge with **Anaconda**, **TensorFlow**, **Keras** and **SKLearn**
Hands-on experience with **OOP** and **Data Structures** including **Trees**, and **Queues**
Academic experience with **Pandas**, **SQL** and working knowledge of **R**
Familiar with **Ubuntu/Linux** and other **Unix** environments
Exceptional **Interpersonal Communication** and **Presentation Skills**
Proficient in **Adobe CC Suite**, including **Photoshop** and **Premiere**

PROJECTS

- GENEActive Reader | Python — Pandas — Numpy — SKLearn | NiMBaL Lab Sept 2019
 - Created and open-sourced automatic extraction of raw GENEActive and Bittium proprietary sensor data
 - Transformed raw biosignals into sensor-based data for both manual and automated signal integrity checks
 - Currently implementing machine learning algorithms for finding key metrics based on sensor data such as wear-time, sleep/wake cycles, etc
- Voice Code | Python — Google Cloud API | Hack the North 2019 Sept 2019
 - Collaboratively created a Python code maker in Python with Google's Cloud Speech to Text and Natural Language APIs
 - Functionality includes variable declaration, commenting, conditionals and looping
- Statistical NBA Dream Team | R June 2019
 - Analyzed raw player data from the 2017-18 NBA season using R to create a theoretical "dream team" for the upcoming season, inspired by "Moneyball"
- VANGUARD | Python — Pygame — Git June 2017 — Sept 2018
 - Learned principles of Object-Oriented Programming through development of a 2D side-scrolling game, earning perfect score as my final high-school project
 - Included file loading, animation and fluid gameplay

WORK AND LEADERSHIP EXPERIENCE

- Data Analyst / Program Developer — Research Assistant Neuroscience, Mobility and Balance (NiMBaL) Lab Sept 2019 — Present
 - Trained a Machine Learning model in Python using Tensorflow, Keras and SKLearn to detect and classify heartbeats extracted from raw ECG data
 - Developed open-source packages to read and process raw accelerometry and ECG data from GENEActiv and Bittium wearable devices efficiently parse raw data to further medical research
 - Automated raw file processing and analysis for extraction of key health indicators
- Freelance Math Tutor May 2018 — July 2019
 - Explained and helped motivate students through International Baccalaureate examinations in Standard-Level Math
 - Offered web-based and in-person assistance to promote active and continuous learning
- President | University of Waterloo Residence Council Jan 2019 — May 2019
 - Attracted over 2000 community event attendees throughout the term through excellent interpersonal and leadership skills
 - Fostered an incredibly positive and engaging team culture

EDUCATION

- Candidate for Honours Math in Statistics 2A | University of Waterloo
Recipient of the University of Waterloo President's Scholarship
Relevant Courses: Elementary Algorithm Design and Data Abstraction,
Designing Functional Programs, Introduction to Combinatorics,