

COOPER LEONG

587 - 899 - 0434 | cooperleong0@gmail.com | cooperleong.com | github.com/barrelmaker | linkedin.com/in/cooper-leong

EXPERIENCE

Junior Software Developer – Centre for Advanced Computing Kingston ON. 09/20 – Present

- Launched a mental health and engagement platform in six weeks using AWS, React, Django, PostgreSQL, Agile workflow
- Lead a team of 5 to develop a SaaS platform that generates questions from text, creates a chatbot, and quizzes students
- Developed a web application on AWS using EC2, S3, RDS, Route 53 with scalability to 36,000 simultaneous users
- Established a professional cadence with clients to maintain and improve relationships, created statements of work

Software Developer Intern – Centre for Advanced Computing Kingston ON. 05/19 – 09/20

- Built the backend and frontend from scratch for a Proof-of-Concept SaaS platform for multiple universities using JavaScript/Node.js, REST APIs, MongoDB, React, Python, Flask, deployed on IBM Cloud using Kubernetes, Docker and Nginx
- Implemented a distributed computing pipeline to predict atrial fibrillation from ECG waveform data using IBM Cloud Functions, Python, Kubernetes, Docker, leading to a 25x increase in efficiency of the data pipeline
- Provided consultation on cloud computing, container orchestration, and cloud infrastructure to prospective clients
- Organized five team members in test driven development, configuration, back-end releases, writing unit tests
- Demonstrated the completed applications to clients and potential investors
- Completed operations work such documentation, user manuals, workshops
- Hired back part time as a Junior Software Developer to project manage two projects

Engineering Co-op – XSENSOR Technology Corporation Calgary, AB. 05/18 – 09/18

- Collected and cleaned motion capture data for machine learning models on pose detection using iPi Soft, Python, Tensorflow
- Increased efficiency of the data pipeline 20x by doubling the capture volume and optimizing the environment for recording
- Created wireframe UI designs for an iOS and Android app using Adobe XD
- Configured, designed, physically built, and installed a new server on location saving over \$30k in two years, still in use

EDUCATION

Queen’s University – BAsC + Professional Internship Kingston, ON. 2016 - 2021

Mathematics and Engineering, Specialization in Systems and Robotics

Courses: Probability, Stochastic Control, Algorithms, Data Structures, Dynamics, Advanced Calculus, Information Theory

Thesis: Optimal Imperfect Vaccination Strategy in a Stochastic SEIQR Epidemic Model

TECHNICAL LEADERSHIP

Winner: Pill-O-Talk (cooperleong.com/Pill-O-Talk) 02/20 – 05/20

- Selected to receive \$5000 of funding and continue forward with the L-SPARK mentorship program out of 50 people
- Created a secure IoT pill management system using BlackBerry secure OS, Solace messaging, and Telus 5G network
- Developed the data pipeline and network communication using Python, Flask, business model, value proposition and KPIs

QWacks Co-founder (cooperleong.com/QWacks) 02/20 – 03/20

- Founded a hackathon at Queen’s University focused on improving technical skills through unnecessary applications of technology
- Developed the website using Node.js, Gatsby, React, hosted on Netlify
- Created marketing material and designs which lead to 130 applicants and a 75% acceptance rate