

Gabby Chan

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Work Experience

TECHNICAL SYSTEMS ANALYST

RBC Capital Markets // Java Spring, Python, Node
January 2020 - April 2020

- Developed end-to-end RESTful clients to support stock pricing and valuation engines handling over 1 million queries per day
- Built Jenkins CI pipelines to automate deployment and 30+ JUnit tests
- Created Python scripts to automate source code generation from ICE
- Applied agile project management skills and managed tasks on Jira

AUTONOMOUS VEHICLE ENGINEERING INTERN

Martinrea International // Java(JNI), C++
June 2019 - August 2019

- Modelled and prototyped an autonomous vehicle to streamline material delivery and support a flexible production line in SolidWorks
- Programmed the vehicle's driving behaviour using the Java Native Interface to integrate C++ code into existing Java infrastructure
- Wrote Linux shell scripts and wired transceivers to enable Controller Area Network bus communication on Nvidia Jetson Xavier processor

SOFTWARE DEVELOPER

ConversationHEALTH // JavaScript
June 2018 - March 2019

- Designed an AI-powered chatbot in JS and Botpress leveraging natural language processing to educate teens on physical and mental health
- Wrote user profiles and designed conversation flow canvases to identify user needs and deliver digestible, relevant content
- Doubled number of subscribers to 20,000, maintaining >90% read rate

Projects

QUARK

Tensorflow, React, Flask

- Training and deploying a convolutional neural network to classify images of clothing uploaded by users and generate complementary color palettes
- Developing a full-stack React/Flask personalized online thrifting store

WELLNOTE

Javascript, MongoDB, HTML/CSS

- Designed a computer vision-assisted engine as a JS web app to decipher user emotions in video and audio diary entries using the Affectiva SDK
- Facilitated secure analytical information transfer using MongoDB

BRACE

Arduino, C++, Swift, Twilio API

- Created an iOS app to parse JSON data in the cloud into a mobile-friendly view of patient information with a Twilio emergency notification system
- Integrated mobile app with bracelet prototype and Arduino RFID sensor

Skills

Languages: Python, Java, C++, JavaScript

Frameworks/Databases: Tensorflow, Flask, React, Bootstrap, Spring Boot, JUnit, Node.js, MongoDB

Management: Jira, Confluence, Agile framework

Tools: Azure, Git, Unix scripting, Jenkins, Maven

Community

TECHNOLOGY LEAD

Canadian Undergraduate Tech Conference 

- Working with designers to promote applications of technology to 500+ students across Canada
- Programming website following responsive design practices in JS/HTML/CSS
- Developing a Selenium Flask bot to monitor social media engagement

BACKEND DEVELOPER

Stanford Response Innovation Lab 

- Creating *The Purple View*, a COVID-19 news reporter to display credible cutting-edge summaries and data visualizations
- Displaying relevant news articles by retrieving urls from Firebase to Kotlin server

Awards

- 2020** DeltaHacks VI - Best MongoDB Hack (WellNote)
- 2020** SheHacks IV - Best Health Hack (Brace)
- 2019** RBC NGI Hackathon - Best Hack (DriveGreen)
- 2019** Two Small Fish Ventures - STEM Scholarship
- 2019** UWaterloo - Raaflaub Family STEM Scholarship

Education

UNIVERSITY OF WATERLOO

Systems Design Engineering, Academic Rep

- Microsoft Campus Partner
- **Courses:** Digital Computation, Digital Circuits, Data Structures and Algorithms, Human Factors in Design

Interests

- Playing piano (15 yrs)
- Dancing (ex-team captain)
- Brewing coffee (ex-barista at Starbucks)
- Public speaking (business case competitions)