MICHAEL DING

Software Developer

PROFESSIONAL SUMMARY

Self-driven university student with programming experience in Agile-based environments. Detail oriented problem-solver with strong familiarity in building complex applications and an interest in data science discovered through professional certifications and multinational research experience.

CERTIFICATIONS

- IBM Advanced Data Science Specialization (2021)
- Amazon Web Services Cloud Fundamentals Specialization (2020)
- IBM Data Science Professional Certification (2020)

LANUAGES AND TOOLS

Languages: Java SE, Python, SQL, Bash, C, JavaScript, HTML/CSS, Turing

Tools: AWS (EC2, S3, Dynamo, Route 53), Apache Spark, Tensorflow, Jupyter, Keras, OpenCV, Pandas, NumPy, Sklearn, SSH, Git, Postman (API Development), NoSQL, MySQL, Excel, Autodesk API, Firebase API

LEARN MORE ABOUT ME

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- Michael Ding
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- (647) 580-8018

WORK EXPERIENCE

Machine Learning Research Intern

Mount Sinai Hospital | Toronto, Canada | Jun 2019 - Sep 2019

- Engaged in an international study applying **deep learning AI** to predict malignity of novel genetic variants
- Developed data-cleansing **Python** scripts on over 40,000 variants
- Decreased false-negative rate by 20% by feeding novel hospital variants into **ML pipeline** to reduce underfitting

Web Developer Intern

GEBIS Toronto | Toronto, Canada | Jul 2020 - Aug 2020

- Developed low-maintenance dynamic website with blogging and e-commerce functionality using **PHP, JavaScript** and **WordPress**
- Fulfilled **user-story** requirements by designing and integrating custom **MySQL** schemas with **WooCommerce REST API**
- Developed in-house email push infrastructure triggered by WooCommerce events and deployed codebase to remote test site hosts through **Git** repositories and **Linux SSH shell**

PROJECTS

StitchAR Android Application 🔗

- Engineered a hackathon mobile application that allows users "stitch" together their 2D photos of any object into a 3D model, view it in the AR engine within the app, and share a unique object ID with others
- Built front-end and integrated **third-party APIs** using **Java** and **Android Studio**
- Handled back-end logic using **Node.js** and **Express**, storing shareable 3D objects with **Firebase**
- Developed login functionality with **Firebase Auth** and set up AR engine with **Google AR Core**

SIIM-ISIC Computer Vision Competition 🔗

- Experimented with and created **convolutional neural networks** to predict probability of a skin lesion being malignant or benign
- Developed models using **Python**, **Jupyter Notebook**, **NumPy**, **Sklearn**, **Tensorflow**, and **Keras**
- Achieved highest AUC – ROC score of 0.90 and used model to build **Android** camera app classifier

Group Chat Web Application 🔗

- Created a live chat server application with support for multiple **concurrent chat rooms** and user sessions
- Implemented dynamic front-end UI using **HTML**, **CSS**, **JavaScript** and **Bootstrap**
- Designed **Node.js** and **Express** back-end while using the **Socket.io API** to handle live web sockets

EDUCATION

University of Waterloo

Computer Science and Finance (Bachelor) | Sep 2020 - Apr 2025

GPA: 3.96 (Term Dean's Honour List Candidate)