Edward Li

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⚒ Skills

- Languages: Python, Java, Go, JavaScript/TypeScript, C/C++, PHP, SQL, HTML, CSS, LaTeX
- Frameworks: PyTorch, TensorFlow, Keras, NLTK, CoreNLP, Numpy, Pandas, Matplotlib, Flask, Android SDK
- Tools: Linux, Windows, Vim, Bash, Git, Jira, MySQL, MongoDB, Redis, Jupyter Notebook, Android Studio

✈ Experience

Data Scientist   September, 2019 – December, 2019

Syngli Inc. (a startup at Communitech)   Waterloo, Ontario, Canada

- Researched and developed intricate algorithms in Python based on deep-dive statistical analysis and integrated them into Syngli's online learning platform written in PHP
- Developed a handwriting manipulation project with Dynamic Time Warping algorithm in JavaScript, which can evaluate the children's handwriting on iPad and provide suggestions for them to make improvements
- Used BERT, NLTK, and coreference resolution from Stanford CoreNLP to develop a semi-automatic relation extraction tool, which can provide suggestions for creating questions from unstructured text
- Involved in the development of the POMDP algorithm for question planning to improve users' learning efficiency
- Built an evaluation method to score users' answers with N-grams, word frequency, and Levenshtein Distance Algorithm, which allows answers to have more flexibility at the syntactic level

Android Developer   January, 2019 – April, 2019

BlackBerry   Kanata, Ontario, Canada

- Created new features for BlackBerry's Personal Information Management Service (Blackberry Hub and BlackBerry Hub[+] Service (with 2M+ installations on the Play Store)) on Android in Java with Android SDK
- Participated in all aspects of the SDLC including planning, technical design, implementation, and testing
- Decompiled phone calling apps from different manufacturers and scraped call logs from notifications they post to improve the compatibility of BlackBerry PIM Service on different Android mobile devices
- Investigated and updated SDK of Blackberry Hub and Blackberry Hub[+] Services to Android Q

Software Engineer   May, 2018 – July, 2018

Wuhan Jiayou Information Technology Co., Ltd.   Wuhan, Hubei, China

- Designed and developed a Dynamic Domain Name Server in Go, which can monitor clients' inactivity and dynamically allocate domain resources accordingly, to allow clients websites to have more tracking capability
- Utilized MySQL to store real-time domain resource usage and created visualization with JavaScript and HTML
- Collaborated on a project to provide DDOS Attack Defence Service for e-commerce and online game companies

⚙ Projects

- **Anime Face Generator**: Trained a Deep Convolutional Generative Adversarial Network with TensorFlow and an anime face dataset, and used it to generate images of anime face with different styles   *October, 2019*
- **Road to Graduation (Hack the 6ix)**: Scraped course information from UW undergraduate calendar and built a visualization of all the required course and their relationships for a selected degree with NetworkX   *August, 2019*
- **Calendar Capture**: Collaborated with other members in a team in The Side Project Club to build an Android app with Google Cloud Optical Character Recognition API, which can help users add events on their calendar by taking a photo of a poster   *February, 2018*
- **Ball Collisions**: Built a GUI demo of the super elastic collisions between balls with Java Swing   *December, 2017*

🎓 Education

University of Waterloo, Waterloo, ON   September, 2018 – April, 2023

B.AS in Computer Engineering, 81% MAV