

EDWARD LI

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SKILLS

- Languages: Python, Java, Go, JavaScript/TypeScript, C/C++, PHP, SQL, MATLAB, LaTeX
- Frameworks: PyTorch, TensorFlow, Keras, NLTK, CoreNLP, Pandas, Matplotlib, Spark, 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.

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
- Created a semi-automatic relation extraction tool with BERT, coreference resolution from Stanford CoreNLP and NLTK, 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

- Developed new features for BlackBerry's Personal Information Management Service (BlackBerry Hub and BlackBerry Hub+ Service) using Android SDK
- Participated in all aspects of the SDLC including planning, technical design, implementation, and testing
- Decompiled phone calling apps from different manufacturers and developed an algorithm that scrape call logs from notifications 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 dynamically allocate domain resources accordingly and monitor clients' inactivity
- Utilized MySQL to store real-time domain resource usage and provided visualization with JavaScript and HTML
- Collaborated on a project to provide DDOS Attack Defence Service for e-commerce and online game companies

RESEARCH EXPERIENCE

Undergraduate Research Assistant

January, 2020 – April, 2020

University of Waterloo · Data Systems Lab

Waterloo, Ontario, Canada

- Worked with Professor Jimmy Lin on tools for information retrieval and question answering built on Lucene

PROJECTS

- **Anime Face Generator:** Trained a Deep Convolutional Generative Adversarial Network with TensorFlow and an anime face dataset, which is capable for automatic anime face generation on demand 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

EDUCATION

University of Waterloo, Waterloo, ON

September, 2018 – April, 2023

B.AS in Computer Engineering, 81% MAV