# **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

## **A** EXPERIENCE

**Data Scientist** 

September, 2019 – December, 2019

Syngli Inc. (a startup at Communitech)

Waterloo, Ontario, Canada

- Researched and developed intricate algorithms in <u>Python</u> based on deep-dive statistical analysis and integrated them into Syngli's online learning platform written in <u>PHP</u>
- Developed a handwriting manipulation project with <u>Dynamic Time Warping</u> algorithm in <u>JavaScript</u>, which can evaluate the children's handwriting on iPad and provide suggestions for them to make improvements
- Used <u>BERT</u>, <u>NLTK</u>, and <u>coreference resolution</u> from <u>Stanford CoreNLP</u> 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) on Android in Java with Android SDK, which involves User Interface designing
- 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 <u>compatibility</u> of BlackBerry PIM Service on different Android mobile devices
- Investigated and updated SDK of Blackberry Hub and Blackberry Hub<sup>+</sup> Services to Android Q

#### **Software Engineer**

May, 2018 – July, 2018

Wuhan Jiayou Information Technology Co., Ltd.

Wuhan, Hubei, China

- Designed and developed a <u>Dynamic Domain Name Server</u> in <u>Go</u>, 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 <u>DDOS</u> Attack <u>Defence Service</u> for e-commerce and online game companies

### **PROJECTS**

- Anime Face Generator: Trained a <u>Deep Convolutional Generative Adversarial Network</u> with <u>TensorFlow</u> 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): <u>Scraped</u> course information from UW undergraduate calendar and built a visualization of all the required course and their relationships for a selected degree with <u>NetworkX</u> *August*, 2019
- Calendar Capture: Collaborated with other members in a team in The Side Project Club to build an <u>Android</u> app with <u>Google Cloud Optical Character Recognition API</u>, 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**