# Edward Li

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## 🔧 Skills

- **Languages**: Python, Java, Go, JavaScript/TypeScript, C/C++, PHP, SQL, MATLAB, LaTeX
- **Frameworks**: PyTorch, SK-Learn, NLTK, Gensim, React, Flask, Spring, Android SDK
- **Tools**: Docker, Git, Jira, PostgreSQL, MongoDB, Redis, Spark, Jupyter Notebook

## ✈ Experience

**NLP Software Engineer** <span style="float:right">January, 2021 – April, 2021</span>

*Huawei* <span style="float:right">Montreal, Quebec, Canada</span>

- Researched and developed adversarial knowledge distillation methods and applied them on intent detection and slot filling on Voice Assistant data. We obtained 99% of the performance of the teacher and significantly higher than the VanillaKD
- Investigated robust knowledge distillation model under noise setting and co-authored research paper to EMNLP

**Data Scientist** <span style="float:right">May, 2020 – August, 2020</span>

*CIBC Data Studio* <span style="float:right">Waterloo, Ontario, Canada</span>

- Built and trained sentence classifier to highlight important sentences from detailed business event description files
- Developed a web application with Flask and React to help analysts read documents and use it to collect labeled data
- Designed and implemented the login authentication mechanism for the web application at the API level and front-end
- Researched on Fully Homomorphic Encryption and its usage on machine learning model

**Data Scientist** <span style="float:right">September, 2019 – December, 2019</span>

*Syngli Inc.* <span style="float:right">Waterloo, Ontario, Canada</span>

- Built statistical algorithms in Python and integrated them into Syngli's online learning platform using PHP
- Developed a handwriting manipulation project with Dynamic Time Warping algorithm in JavaScript, which can evaluate the children's handwriting on iPad and provide real-time suggestions for them to make improvements
- Designed an algorithm for answer evaluating with BLEU Score and BERT Model to allows answers to have more flexibility
- Involved in the development of the POMDP algorithm for question planning to improve users' learning efficiency

**Android Developer** <span style="float:right">January, 2019 – April, 2019</span>

*BlackBerry* <span style="float:right">Kanata, Ontario, Canada</span>

- Developed new features and fixed issues for BlackBerry's Personal Information Management Service (BlackBerry Hub and BlackBerry Hub$^+$ Service) on Android, including core functionality, UI and widgets
- Investigated and updated SDK of Blackberry Hub and Blackberry Hub$^+$ Services to Android Q

**Software Engineer** <span style="float:right">May, 2018 – July, 2018</span>

*Wuhan Jiayou Information Technology Co., Ltd.* <span style="float:right">Wuhan, Hubei, China</span>

- Developed a Dynamic DNS in Go, which can dynamically allocate domain resources and monitor clients' activity
- Utilized MySQL to store real-time domain resource usage and provided visualization page with JavaScript and HTML
- Collaborated on a project to provide DDOS Attack Defence Service for e-commerce and online game companies

## ⚙ Projects

- **Microservices**: Developed a student management system with Micro Services architecture using MongoDB, React, and Spring Cloud <span style="float:right">*May, 2021*</span>
- **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 <span style="float:right">*October, 2019*</span>
- **Road to Graduation (Hack the 6ix)**: Scraped course information from the UW undergraduate calendar and built the visualization of all the required course and their relationships for a selected degree <span style="float:right">*August, 2019*</span>

## 🎓 Education

**University of Waterloo**, Waterloo, ON <span style="float:right">September, 2018 – April, 2023</span>

*B.AS* in Computer Engineering, Honors, Co-operative Program (Option in Statistics)