Jackie Zhu

416-688-9952 | y497zhu@gmail.com | linkedin.com/in/yj-zhu | github.com/YiJie-Zhu

EDUCATION

University of Waterloo   Cumulative GPA: 3.95/4.0
Bachelor of Applied Science, Mechatronics Engineering   *Sep. 2019 – May 2024 (Expected)*
- **Relevant Courses**: Data structures and Algorithms, Systems Programming and Concurrency, Real-Time OS

EXPERIENCE

Software Engineering Intern   May 2022 – Present
Uplift – Servicing Team (Backend)   *Toronto, ON*
- Developed a funds disbursement service used to process virtual credit card related requests using **Python**
- Implemented **integration tests** to ensure the functionality of card operation endpoints by mocking requests and monitoring data from various databases
- Created **AWS lambda** functions to parse through **14** ASCII files daily to ensure integrity of loan information
- Revamped loan **ETL pipelines** by adding data validation and distributed data processing with **PySpark**; increased processing speed by **10x**

Software Engineering Intern   Sep. 2021 – Dec. 2021
Searchspring – Internal Applications Team   *Remote*
- Developed a tool that streamlines the deployment process of 20+ applications using **Kubernetes** and **Golang**
- Minimized downtime between **Docker** container deployments by **90%** through monitoring responses of application endpoints and restricting **Kubernetes** pod termination until start-up process of new pod finishes
- Built a Chrome Extension that communicates with **AWS Redshift** to display sales data for **1000+** eCommerce shops; reduced the size of Redshift queries by **95%** through caching sales data on local chrome storage
- Created **6 PostgreSQL** queries that join data from multiple databases to generate detailed marketing reports

Full Stack Developer Intern   Jan. 2021 – Apr. 2021
Waterloo Pentecostal Assembly – Technologies Team   *Remote*
- Led the design, development, and deployment of a social platform for local communities using **Flutter** and **Dart**
- Increased client-side loading efficiency by **25%** by locally caching large files and implementing **Firebase cloud functions** for heavy workloads using **Node.js**
- Designed a scalable **NoSQL** database that minimizes the number of read/write operations; decreased cost by **70%**

Test Engineer Intern   June. 2020 – Sep. 2020
Multimatic Inc– Dynamic Suspensions   *Newmarket, ON*
- Created a **Python** script using **Pandas** to automate the documentation and visualization of torque test results
- Finalized the manufacturing process of a new ball joint for Ford trucks by analyzing its **resistance under motion**

LEADERSHIP

Software Team Lead   Sep. 2021 – May 2022
WATOLink – Connected Software Team   *Waterloo, ON*
- Managed 20 developers on the development of a brain-controlled keyboard using **EEG technology** and **Python**
- Integrated autocorrect and word/sentence prediction features with machine learning using **OpenAI**

PROJECTS

Crypto Identity | *github.com/YiJie-Zhu/Crypto-Identity*   May 2021 - June 2021
A Non-Fungible Token that replaces personal identifications by storing encrypted data
- Built a client-facing website using **ReactJS** for users to create their digital ID and mint it into an **NFT**
- Used **Solidity** and the ERC-721 standard to create a smart contract deployed onto a local **blockchain**

TECHNICAL SKILLS

Languages: Python, C/C++, Golang, JavaScript, SQL (Postgres), HTML/CSS, Dart
Technologies: AWS, Kubernetes, Dockers, Firebase, PySpark, Flask, React, Node.js, ExpressJS, Flutter, Git
Certifications: AWS Cloud Practitioner, Udemy SQL Bootcamp