Bill Jingwei Li

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EDUCATION

University of Illinois at Urbana-Champaign, Illinois, IL	Master of CS	GPA: 3.9/4.0	Dec 2019
University of Toronto, Toronto, ON	Bachelor of CS	GPA: 4.0/4.0	Aug 2018

WORK EXPERIENCE

Senior Machine Learning Engineer, Boulder AI, Hangzhou, China

Sep 2021 - May 2024

- Constructed large language models (LLMs) chatbots to interact with customers, reducing 70% of labor communication cost.
- Fine-tuned LLM to improve 30% accuracy on customer responses and formed 20% of useful business rules and expertise.
- Developed OCR models using RNNs and NLP on paper recognition, achieving 90% accuracy and reducing 82% labor time.
- Used NLP word segmentation for company name parsing with 80% auto-labeling accuracy, reducing 90% labor time (C++).
- Built data analytics index system from scratch and Text-to-SQL model with Power BI, ETL, S3, Lambda and Redshift.
- Transformed MySQL databases between companies using data mapping and cosine similarity, improving 70% efficiency.
- Employed time-series models like ARIMA to forecast 1-3 months product sales with less than 5% bias using C#, .NET.
- Managed a 10-member team, deploying AI strategies(deep reinforcement learning) into production.
- Optimized operations research algorithms such as APS in Python, increasing production efficiency by 20%.
- Improved API response rate by 500% using **Redis** for **caching asynchronous** info.
- Combined diverse data sources (NoSQL, MySQL, byte files) into DocumentDB with 98%+ efficiency.

Machine Learning Engineer, Alibaba Cloud, Hangzhou, China

July 2020 – Sep 2021

- Developed **ensemble learning** (CART, CNN) to optimize bus transit scheduling, reducing passenger wait time by 35% and operation time by 5%.
- Applied time-series model to predict parking availability with 90% accuracy in High Moral map services.
- Utilized statistical and time-series models to improve IoT anomaly detection from rule-based 30% to 85% accuracy.
- Implemented PCA and stat model **correlation analysis** using **Python**, **Flink**, **PostgreSQL** to improve generalized anomaly accuracy from 85% to 95%.
- Used **Tensorflow** and **feature engineering** to find high-value customers, increasing Cloud product sales revenue by 30%.
- Gained certifications: ACP Data Analyst, Cloud Computing, Big Data (match AWS certificates).
- Optimized ETL pipelines by 30%+ using AliCloud products DTS, MQ, Kafka, Blink and ODPS.
- Increased TB-level IoT data stream cleanness from 75% to 95%+ with Python, Java, PostgreSQL, OTS.

Software Development Engineer, Cohesity, Mississauga, Canada

Sep 2019 – May 2020

- Built up **operations automation** pipeline for internal object creation, domain registration, software configuration, email automatic forward using **Golang**, **bash shell script**, HTML and VanillaGinkgo.
- Measured bridge performance by vdbench and fio testcases daily automation with analytics.
- Configured cluster nodes by force install with auto-generation of performance reports in Jenkins.
- Constructed data pipelines to integrate JSON, XML format files in MongoDB.

Machine Learning Engineer Intern, Alibaba Cloud, Hangzhou, China

May 2019 – Aug 2019

Full-Stack Developer, Ministry of Education, North York, ON

May 2018 - Dec 2018

- CRUDed data from SQL databases. Implemented app screening functions in Spring and optimized OSAP admin service using Docker, K8s, Java, JavaScript, XML.
- · Maintained financial payment server using Spring Boot, MyBatis with analysis of real-time noisy data.

Data Engineer, IESO, Oakville, ON

May 2017 – Aug 2017

SKILLS

- Machine Learning: Deep Learning, Reinforcement Learning, Ensemble Learning, NLP, Anomaly Detection, Time Series
- Data Science: PyTorch, Scikit-Learn, TensorFlow, Pandas, Numpy, SciPy, NLP, Flink, Hive
- Programming: Python & SQL (6 yrs), Java (5 yrs), R & SAS (4 yrs), JavaScript (3 yrs), HTML & CSS, MatLab, C++
- Cloud Computing: AWS (S3, ECS, EMR, Lambda, Redshift), Azure, GCP, ACP(Alibaba Cloud Professional)
- Databases & DWH: MySQL, NoSQL (MongoDB), OLAP (DocumentDB), Graph Database, Distributed File System