

MAX JIANG

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SKILLS

Programming Languages: Python, C++, Java, SQL, Bash, Golang, Javascript

Libraries/Tools: AWS, Git, NumPy, pandas, scikit-learn, TensorFlow, PyTorch, Matplotlib, Cython, Linux, Docker

EXPERIENCE

Software Development Engineer – AWS RDS Exports to S3 Sep 2025 – Present
AWS

- Reduced deployment lag by **50%+** by collaborating across teams to resolve CI/CD test failures, accelerating feature delivery across AWS regions
- Improved service reliability by fixing failure cases & **automating error recovery**, reducing manual ticket volume for on-call engineers
- Built **monitoring infrastructure** for export workflows, tracking performance metrics to improve visibility

Global Markets Intern – Credit Algorithmic Trading Sep – Dec 2024
UBS

- Measured the impact of adding equity-based signals to ML models for corporate bond return prediction
- Conducted analysis of client trading behavior during major economic events, identifying trends to inform risk management
- Optimized **Python & Pandas** code for computing intraday trading signals, increasing speed by up to **40%**

Software Engineer – Distributed Data Storage & Management Lab Jan – Apr 2024
Huawei Technologies Canada

- Designed & implemented a **parallel vacuuming system for the LSM tree index**, ensuring efficient data compaction during high-volume data insertion
- Achieved up to **6x improvement in query performance** on benchmark tests

Research Assistant – Dept. of Statistics & Actuarial Science Sep – Dec 2023
University of Waterloo, Prof. Mu Zhu

- Researched bias-variance decomposition for the **AUC metric in binary classification**
- Created simulations to analyze AUC bias-variance trade-off in various models

Machine Learning Engineer May – Aug 2023
BitCloud Technology Inc.

- Created a chatbot with Python for Shopify stores using **GPT-3.5 with vector embeddings**

PROJECTS

Corintho AI | [Github](https://github.com)

- Built a DRL agent based on AlphaZero to play Corintho using **TensorFlow (NN)**, **C++ (MCTS)** & **Python**
- Optimized playing algorithm with C++ & OpenMP to efficiently play **25k games in parallel**; **2.5M+** total training games on GCP
- Ran a **2M-game** evaluation tournament with **Bayesian** pairing & MLE Elo estimation; agent reached superhuman play

EDUCATION

University of Waterloo Sep 2020 – Apr 2025
Bachelor of Mathematics – Double Major **Computer Science & Statistics**

- Dean's Honours (**91%** cumulative GPA)
- W. T. Tutte National Math Scholarship

AWARDS

Putnam Math Competition, Top 500 x 3 2023-2025

- Solution selected for **publication** in Oct 2025 American Mathematical Monthly

Canadian Computing Olympiad, Bronze Medalist 2019

International Linguistics Olympiad, Silver Medalist 2019