Kuan Yi Wang

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Education

University of Waterloo *Expected Graduation Date*: April 2029

Bachelor of Computer Science *Waterloo, ON*

- **Relevant Coursework:** Data Structures & Algorithms, Multivariable Calculus, Reinforcement Learning

Technical Skills

Languages: Python, JavaScript/TypeScript, SQL, Bash, Shell
Frameworks: Flask/React/Next.js, PyTorch, Tensorflow
Developer Tools: GitHub Copilot/Cursor, Figma, Google Cloud, Claude Code, Codex, OpenClaw, Unix-style CLI
Libraries: IBM Qiskit/Google STIM, scikit-learn, numpy, pandas, nn-UNet, Keras

Industry Experience

Technology Analyst Intern May 2026 – Aug. 2026

Morgan Stanley *Montréal, QC*

- Accelerated by 20× FIX message rule persistence through an agentic orchestration pipeline spanning multiple SQL database schemas, supporting a brokerage system processing billions of transactions daily.
- Achieved a linearly faster insertion rate via parallel agent execution and automation, from open Jira ticket to completing unit/regression testing across the CI/CD pipeline.

Research & Development Intern June 2025 – Jan. 2026.

Neuropoly (Mila) *Montréal, QC*

- Increased by 45% segmentation accuracy by training and fine-tuning spinal rootlets and multiple-sclerosis lesion 3D-UNets for the open-source Spinal Cord Toolbox (SCT).
- Increased by over 125% inference speed of 3D-UNets through image pre-processing (smart cropping and resizing).
- Increased by over 80% segmentation and annotation speed of MRI and CT images through contribution to SlicerCART, an open-source medical image viewer for distributed clinical use.

Notable recent projects

GNN Quantum Error Decoder, ISEF Oct. 2025 – May 2026.

Phoenix, AZ

- Silver Award at the International Science and Engineering Fair, Physics & Astronomy **(<0.1% worldwide)**.
- Designed input-invariant graph neural networks (GraphSAGE) to decode quantum errors on surface codes.
- Achieved error resistance with 5-7 times fewer parameters than standard neural networks, while constantly inferencing at sub-50 microseconds speed.

Cortesol, Hackthe6ix 2026 Finalist Project Aug. 2026

Toronto, ON

- Fine-tuned Qwen3.5-9B, aiming to develop critical thinking over an existing weighted graph knowledge base.
- Leveraged supervised fine-tuning, on-policy distillation and GRPO for 95 % graph expansion accuracy.
- Built a deterministic evidence pipeline that blocks direct confidence rewrites, cutting false-positive jumps by 75%.

V-JEPA based Multimodal Conversational Agent June 2026

Waterloo, ON

- Used a V-JEPA-inspired world model to predict near-future turn taking, dialog act, and uncertainty from face/voice/text/quality signals, improving macro F1 on MELD from 0.682 to 0.748 (+9.7% relative).
- Improved over prior multimodal baselines via reliability-gated fusion across 6 modalities and an RSSM world model, reducing validation loss from 1.21 to 0.93 (-23.1%).
- Replaced fragile end-to-end media training with a cache-first MELD pipeline and checkpointing, reducing end-to-end iteration time from 3.8 h to 2.4 h (-36.8%) on a Colab T4.

Leadership

Piñata Pitch (non-profit) Co-founder Sept. 2024 – Present

San Francisco Bay Area, CA

- Co-founded the largest student tech pitch competition based in Montreal, scaled to 2000+ members world-wide.
- Organized the Special Edition of Builder Sunday (AI Build Day x Pinata Pitch) with **Shopify**, helping more than 200 builders launch their startup in a hackathon-style networking event at the Montreal Shopify office.
- Organized unfounders, a hackerhouse in San Francisco promoting untraditional founders during a16z Tech Week.
- Raised $35 000 and organized Piñata Pitch x Startupfest 2026, backed by Mila, Botpress and Morgan Stanley.