Zhuoran Wang

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Education:

Sep 2021 - Present **Bachelor of Applied Science, Computer Engineering** University of Toronto

- Minor in Artificial Intelligence Engineering
- Cumulative GPA: *3.95 / 4*
- University of Toronto Scholar; Dean's Honor List for every semester

Professional Experience:

May 2025 - July 2025 **Software Development Engineer** Amazon

- Worked as part of the Amazon Kids Organization
- Built AWS based content moderation services with AWS provided AI tools, like Comprehend, Guardrail, and Bedrock models
- Used Java and Typescript to build backend and infrastructure

May 2024 - April 2025 **Machine Learning Researcher** Huawei Canada

- Conducted research in Computer Vision and Diffusion-related topics.
- Followed and presented up to date research papers for weekly group meetings.
- Designed and implemented modular adapters on UNet and Transformer-based Diffusion models for fine tuning with limited data and computation power.
- Authored and submitted a research paper to CVPR 2025.
- Contributed to testing and debugging of new features in the Huawei Pura 70 phone.

Projects:

Sep 2023 - Nov 2024 **Researcher, Far Data Lab** University of Toronto

- Collaborated with Professor Qizhen Zhang to explore federated learning.
- Conducted experiments evaluating the effect of federated settings on state-of-the-art models for language, image, video and audio tasks.
- Built a data preparation pipeline for federated learning.
- Authored and submitted a research paper on arxiv “An Empirical Study of the Impact of Federated Learning on Machine Learning Model Accuracy”.

Oct 2024 - Jan 2025 **Web Director, UTRA** University of Toronto

- Led the renovation of the club website using HTML5.
- Redesigned and implemented a modernized site structure and styling.

Sep 2023 - Dec 2023 **Team Lead, Deep Learning Course Project** University of Toronto

- Analyzed accelerometer data to enable large-scale sleep monitoring studies.
- Applied RCNN models to address object detection challenges in sleep pattern analysis.
- Authored an ICLR-style research report detailing findings and methodologies.

Skills:

Programming Languages: Python, C++, Java, TypeScript
Frameworks & Tools: PyTorch, Diffuser, Federated Learning platforms (flower), AWS
Research Focus: Computer vision, diffusion models, federated learning