

Mingran Xu

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EDUCATION

University of Washington, Seattle

Sep 2021 - Present

B.S. in Computer Science

B.S. in Applied and Computational Mathematical Sciences - Discrete Math and Algorithms

Cumulative GPA: 3.83

WORK EXPERIENCE

Software Development Engineering Intern | Mercedes-benz

Jun 2024 - Nov 2024

- Extracted account deletion requests from the system and managed unnecessary account operations through the interface. Ensured that deletion requests between accounts are accurate.
- Implemented robust data persistence and recovery mechanisms in a Spring Boot application by leveraging Kafka and PostgreSQL. Enhanced system reliability through scheduled tasks for continuous data synchronization and fault tolerance.
- Avoided unnecessary alert tasks that monitor redundant account deletion inconsistencies by aligning account deletion records across systems and managing the resolution of subtasks.
- Acquired knowledge of cloud platform structures and engaged in designing cloud platforms.

Innovation Center Asia Mobility Technology Intern | Volkswagen

Feb 2025 - Jun 2025

- Developed and implemented Power BI-driven data filtering and visualizing framework to process data for ADAS/AD assessment.
- Research on synthetic data application for training and testing of AI related autonomous driving solutions.
- Assisting colleagues in R&D projects by executing scientific literature research.

PROJECT EXPERIENCE

Squares Design Web App

Aug 2025

- Built a full-stack square editor with interactive features using tree-based data structure.
- Implemented React + TypeScript front-end with modular components and polished CSS UI.
- Designed an Express API backend for file management and configured the Webpack build pipeline with loading states and error handling for robustness.

Insight Scope: Key Sentence Extraction in News Article

May 2024

- Fine-tuned a T5 model on the MultiNews dataset to generate news summaries. Used the all-mpnet-base-v2 model to compute sentence similarities and selected the top k% of sentences, ensuring diversity by dynamically comparing sentences to avoid redundant selections.

uMessage

December 2023

- Developed a Java Swing/JavaFX GUI with spell checking, word recommendations, and AIML chatbot integration, optimizing performance using advanced data structures and sorting algorithms.

TECHNICAL STRENGTHS

- Possesses extensive experience with various Java data structures, algorithms, and multi-threading
- Familiar with fundamental language models and has hands-on experience with neural networks
- Programming Languages: Java, Typescript, SQL, Python, C++, MATLAB