Yu Lo

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EDUCATION

University of Washington – Seattle, MS, Electrical and Computer Engineering   09/2025 – 06/2027
- Coursework: Introduction to Database Systems, Engineering Entrepreneurial Capstone, Software Engineering for Embedded Applications (C, C++), Machine Learning Operations, Data Structures and Algorithms for ECE Applications (Java)

Northeastern University – Seattle, MS, Computer Science, GPA: 4.0 / 4.0   01/2025 – 08/2025
- Completed MSCS coursework with 4.0 GPA; transferred to University of Washington MS ECE program

SELECTIVE PROJECTS

NASA JPL Capstone Project: AI Testbed Operations Assistant *(Role: Software Engineer)*   12/2025 – 06/2026
Tech: Python, React, Speech-to-Text (Whisper), LLM APIs, WebSocket, PostgreSQL, Docker
- Designing an AI assistant for NASA JPL testbed operations that ingests live telemetry and operator conversations into structured engineering logs, anomaly summaries, and searchable records
- Implementing Python-based backend services, LLM/NLP pipelines, and a web dashboard with database and API integration so engineers can query historical test data and correlate system events with natural-language notes

MLB Pitcher Performance Dashboard   10/2025
Tech: Python, React, TypeScript, FastAPI, SQLite, Tailwind CSS
- Built a full-stack web application for the Washington Nationals to summarize 2025 MLB pitching data for performance analysis
- Designed a FastAPI backend with a SQLite database and a React/TypeScript + Tailwind frontend with custom charts to visualize pitch usage and quality metrics in a responsive dashboard

Cloudflare AI Baseball Stats Agent (Live Site / GitHub)   09/2025
Tech: TypeScript, Cloudflare Workers, Wrangler, D1 (SQLite), Llama 3.3 Model Binding, Git
- Built and deployed AI-driven baseball analytics agent on Cloudflare Workers, using Llama 3.3 to translate natural-language queries into SQL against a D1 database with 56,000+ MLB pitching records (2018-2024)
- Engineered multi-stage LLM pipeline (SQL generation → Query execution → Response formatting) with structured prompt design, query safety mechanisms, and fallback logic for robust error handling

Xcelerate: Excel Automation AI Copilot (GitHub)   04/2025
Tech: Python, JavaScript, HTML/CSS, Flask, Tailwind CSS, Pandas, Google Gemini API, Chrome Extension Development, Git
- Built an Excel automation copilot that lets non-technical users perform complex spreadsheet transformations via natural-language commands, using a Flask REST API, Gemini integration, and a responsive JavaScript/Tailwind frontend
- Implemented robust Excel workflow processing for .xlsx/.xls files with error handling and metadata-preserving exports, reducing manual spreadsheet manipulation time by ~67%

Pinception: Chrome Extension for ChatGPT (Live Site / GitHub)   01/2025
Tech: JavaScript/TypeScript, Google Chrome Extension APIs, Chrome Storage API, CSS, Git
- Created a Chrome extension for ChatGPT users to save, search, and reuse prompts with privacy-first local-only storage; launched on the Chrome Web Store with a 5/5 rating

PROFESSIONAL EXPERIENCE

PAREXEL   12/2018 – 11/2024
Senior Statistical Programmer (Focus: Backend & Data Infrastructure)
- Engineered automated data-processing frameworks to process large-scale clinical datasets, cutting execution time from 24h to 3h (~85% faster)
- Developed an MD5-based code-duplication detection framework to identify redundant scripts across parallel data-processing pipelines, reducing manual verification effort by 38% and improving reproducibility across studies
- Added robust error handling, logging, and monitoring to COVID-19 interim analysis pipelines in Unix/Linux and introduced Git-based code reviews, reducing debugging and rerun time by 43% and improving reliability
- Led a 6-member team through release cycles and collaborated with QA/compliance to engineer audit-ready infrastructure, delivering backend data infrastructure that supported regulatory submissions for first FDA-approved nasopharyngeal carcinoma treatment in 30+ countries

SKILLS

- **Programming:** Python, Java, JavaScript, Typescript, C, C++, Go
- **Frameworks & Libraries:** HTML, CSS, Tailwind CSS, React.js, Flask, RESTful APIs, API Design
- **DevOps & Cloud:** AWS (EC2, S3, Lambda), Cloudflare Workers, CI/CD pipelines, Unix/Linux Environments
- **Databases & Tools:** SQL, Pandas, Algorithms & Data Structures, GitHub, Jira, ETL Pipelines, Data Processing
- **AI/ML:** Natural Language Processing, Prompt Engineering, LLM Integration, Cloudflare Workers AI (Llama 3.3), Google Gemini API