# Yiqing Sun (William)

#### **Education**

### **Carnegie Mellon University**

Pittsburgh, PA

Master of Science, Information Systems Management (MISM).

2025 - 2026

**Tianjin University** 

Tianjin, China

Bachelor of Management, Information Management and Information Systems.

Awarded as an Outstanding Graduate (GPA: 3.83/4.0); WES Transcript \(\mathcal{L}\).

2021 - 2025

# **Professional Experience**

### Shanghai Mingchen Mould & Plastic Technology Co., Ltd, Ticker: 000700.SZ

Shanghai, China

Software Development Intern, Project Management Department

Jul. 2024 - Oct. 2024

- Collaborated with cross-functional teams to analyze core business workflows and authored 3 functional specification documents; designed a unified database schema encompassing 40+ key fields and corresponding data validation rules.
- Developed and deployed backend database services leveraging Lark (an all-in-one collaboration platform by ByteDance) and **JavaScript** for data visualization and frontend functionalities, ensuring stable operations of the mould management system.
- Implemented ~30 test cases covering functional scenarios and edge conditions, significantly enhancing system robustness.
- Engineered a migration pipeline for 3k+ historical records, 100% eliminating manual input errors and improving data integrity.

## **Ernst & Young Hua Ming LLP**

Shanghai, China

Data Analysis Intern, Assurance Department

Jan. 2024 - Mar. 2024

- Executed ETL on million-scale financial records from SAP and UFIDA ERP systems; designed automated audit workflows with **Alteryx** (a workflow-based tool for data analysis and processing) to reconcile trial balances and financial report statements.
- Supported Porsche and Bosch audits by deploying EY Helix, Alteryx to build workflow-based data pipelines that interrogated journal entries and general ledgers; flagged potential compliance risks and forwarded high-risk leads for on-site investigation.
- Utilized **Power BI** to visualize and compare year-over-year transaction data across product lines, identifying financial anomalies.

## **Personal Projects**

## SimpleBank: Bank Service Written in Go

Pittsburgh, PA

[LOC 6k] Full-Stack Developer, Repository 2

Jul. 2025 - Nov. 2025

- · Developed backend microservices in Go, providing RESTful APIs (Gin) and gRPC to enable inter-service communication for core banking business (e.g. inter-account transfers); implemented **Gin middleware** for logging, exception handling, rate limiting etc.
- Ensured data consistency for transactions through PostgreSQL transactions and SQLC-generated, type-safe SQL; improved query performance by over 30% through DB indexing and Redis caching; resolved concurrency conflicts using distributed locks.
- · Leveraged AWS-managed services (RDS PostgreSQL, ElastiCache Redis) to ensure scalability and performance under high concurrency; containerized the application using Docker and orchestrated deployment on AWS EKS with Kubernetes.
- Implemented secure authentication mechanisms using Paseto tokens; streamlined software delivery, unit testing, integration testing via automated CI/CD pipelines with GitHub Actions and AWS.

## Gastronome: A Business Recommendation System Powered by Django

Tianjin, China

[LOC 12k] Full-Stack Developer, Undergraduate Capstone Project, Repository &

Jan. 2025 - Jul. 2025

- Built scalable backend using **PostgreSQL**, **RabbitMQ**, **OpenSearch**, achieving stable performance of 60 RPS, 95<sup>th</sup> percentile latency < 100ms under 200 concurrent users; automated CI/CD with GitHub Actions (158 unit tests, 90% test coverage).
- Designed a hybrid recommendation algorithm integrating Collaborative Filtering and a DistilBERT NLP model, reducing rating prediction MSE by 88.1% to 2.09; integrated **GNN embeddings** to enable KNN-based recommendations of similar businesses.
- Implemented asynchronous task processing pipelines using Celery and decoupled heavy model inference via gRPC, enabling efficient remote model serving and offloading from main servers.
- Automated daily ETL and incremental model retraining pipelines using Apache Airflow 3 DAGs.
- Containerized application deployment using Docker; DevOps monitoring with Diango Admin and Sentry.

#### **Core Skills**

**Programming Languages (approx. LOC):** Python ( $\sim$ 18k), Go ( $\sim$ 6k), Java ( $\sim$ 1k), C++ ( $\sim$ 1.3k), SQL.

Backend & Web Application Development: Proficient in MTV frameworks (Django) and front-end/back-end decoupled architectures, with experience in cloud deployment and DevOps on Linux (Ubuntu).

Software Development: Object-Oriented Programming, Relational Database, Message Queue, RESTful API Design & Integration, RPC Microservices, Modular System Design, Unit Testing, Recommendation Algorithms, Transformers.