

# ZHAOXUAN (ISAAC) JIN

☎ (608) 949-0667 ✉ whale3ye@gmail.com 🔗 linkedin.com/in/zhaoxuan-jin 🐙 github.com/WHALEEYE

## Education

### Northwestern University

Master of Science in Computer Science | **GPA: 4.00/4.00**

Sep. 2023 – Jun. 2025

Evanston, Illinois

### Southern University of Science and Technology

Bachelor of Engineering in Computer Science and Technology | **GPA: 3.71/4.00**

Sep. 2019 – Jun. 2023

Shenzhen, Guangdong, China

## Work Experience

### Syntropix

Founder & CTO

Feb. 2025 – Present

United States

- Co-designed and built Syntropix DB, an AI-native ERP platform from the ground up, enabling first-class collaboration with LLM agents instead of retrofitting legacy ERP architectures.
- Architected a modular, plugin-based system to support rapid customization for small and mid-sized businesses with non-standard workflows.
- Worked directly with customers alongside the CEO, acting as a technical bridge to translate business workflows and edge cases into concrete system and architectural requirements.
- Collaborated in a lean two-engineer team, emphasizing UX-driven simplification and long-term code maintainability through refactoring, critical reviews, and consistent design patterns.

### Eigent / Camel AI

Software Engineer

Jun. 2024 – Jan. 2025

United States

- Core developer of the open-source LLM multi-agent framework CAMEL (15.1K stars).
- Led the design and implementation of **Workforce**, an agent orchestration system that has become one of the core architectures within CAMEL for coordinating multi-agent task execution.
- Refactored the core agent execution pipeline by replacing patch-based conditional logic with a polymorphic design, encapsulating agent-specific behaviors within agents and simplifying the shared runtime.
- Reduced core runtime code by over **one-third** (from **~1500 LOC to under 1000 LOC**), significantly improving readability, maintainability, and the ease of extending new agent types without modifying shared execution logic.

## Selected Course Projects

### Multi-Layer Compiler | C++

Jan. 2024

- Designed and implemented a multi-layer compiler end-to-end, independently completing a two-person course project using modern compiler architecture.
- Built a full compilation pipeline from source code to intermediate representation (IR) and assembly code generation.
- Implemented core data-flow analyses including reaching definitions and liveness analysis, and designed a graph-coloring-based register allocator.
- Applied performance optimizations such as dead code elimination and loop unrolling, achieving a top-5 ranking in the final compiler competition.

## Publications & Research

**OWL: Optimized Workforce Learning for Multi-Agent Task Automation** | *NeurIPS 2025*

**AutoSeg: Automatic Micro-Segmentation Policy Generation** | *Computers & Security, 2025*

- Contributed to system evaluation and large-scale experiments on real-world cloud-native applications, validating automated micro-segmentation policy generation under realistic deployment scenarios.

**Breaking the Bulkhead: Cross-Namespace Reference Vulnerabilities in Kubernetes Operators** | *NDSS 2026*

- Performed vulnerability analysis and proof-of-concept exploitation on open-source Kubernetes Operators, uncovering real-world privilege escalation issues and contributing to responsible disclosure with 2 assigned CVEs.

## Technical Skills

**Languages:** Java, C/C++, Python, TypeScript

**Backend & Systems:** FastAPI, PostgreSQL, Next.js

**AI / LLM Systems:** LLM Agents, Prompt Engineering, RAG

**Infrastructure:** Docker, Kubernetes, GCP, AWS, Azure

**Systems & Performance:** Compiler Optimization, IR Design, Data-Flow Analysis