

Wentao Zhang

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Education

University of Illinois at Urbana-Champaign

Dec 2024

Bachelor of Science in Computer Science with a Minor in Mathematics

Major GPA: **3.7/4.0**

- Dean's List: Spring 2021, Fall 2021, Spring 2022
- Relevant coursework: Backend Development, Machine Learning, Algorithms, Database Management System, Operating System, Data Structure

Experience

G128 LLC

Willowbrook, IL

Software Development Engineer Intern

May 2023—Dec 2023

- Spearheaded the transformation of manual trading data management by designing and implementing a relational database on **MS SQL Server** to store the company's trading data and product information, replacing the previous Excel-based system.
- Utilized SQL commands and **SSIS** packages to automate inventory modeling processes which were previously executed via VBA, resulting in a **91.7% reduction in processing time** (processing time **reduced from 2 hours to 10 mins**).
- Developed and optimized multiple **SSIS processes** to perform specific tasks, including the inventory model outputting, data loading, and data validation, enhancing overall operational efficiency.
- Conducted rigorous testing and troubleshooting to ensure data accuracy and seamless integration with existing systems.

HD Education

Champaign, IL (remote)

Tutor

Aug 2022—Present

- Instructed students on Linear Algebra principles and facilitated comprehensive review sessions.
- Developed tailored teaching plans and curated concise lecture slides to reinforce learning objectives.
- Achieved a notable 10% increase in students' exam scores upon completion of the course.

University of Illinois at Urbana-Champaign

Champaign, IL

Course Assistant

Aug 2022—Dec 2022

- Served as a Course Assistant for Math 257: Linear Algebra with Computational Applications.
- Conducted regular office hours to provide dedicated support and assistance to students with homework inquiries.
- Facilitated weekly lab sessions, collaborating with fellow teaching staff to assist students in tackling coding challenges, particularly in **Python**.
- Played a key role in coordinating course logistics alongside other teaching staff, ensuring seamless operation throughout the semester.

Activities and Projects

Game Designer, Multi-Level Shooting Game (Unreal Engine 5)

May 2024

- Collaborated in a team of five and developed a fully functional shooting game using **Unreal Engine 5** from the ground up, incorporating multiple enemy types and interactive elements to increase game complexity.
- Spearheaded the **game logistics**, implementing robust mechanics to ensure players can successfully complete or fail levels based on their gameplay strategy.
- Crafted multiple game levels and maps, focusing on **strategic layout** to enhance playability and challenge, ensuring a diverse gaming experience.
- Project can be found: <https://github.com/Wentao-7114/ShootingGame>

Database Designer and Backend Developer, IMDb Anime Platform

Dec 2023

- Collaborated in a dynamic team to develop the IMDb Anime Platform, focusing on providing a comprehensive database and user-friendly interface for anime enthusiasts
- Assumed sole responsibility for the **database design and management** using **MS SQL Server** on **Google Cloud Platform**, ensuring efficient data organization and retrieval for an enhanced user experience.
- Spearheaded the **backend API development** using **Node.js**, implementing robust and scalable solutions to handle various data operations and user interactions
- Project can be found: <https://github.com/Wentao-7114/IMDb-Anime-Platform>

Co-leader and participant, Beijing Metro System Simulator

Nov 2021

- Spearheaded the design and implementation of a **C++** based simulator for the Beijing Metro as a final project for a Data Structure course.
- Developed an intuitive system allowing users to input start and final stations, with the program calculating and displaying the shortest path and estimated travel time.
- Engineered custom data structure to enhance the functionality and efficiency of the simulator, serving as the project's foundational elements.
- Employed advanced **graph algorithms** to facilitate efficient route finding and time estimation, ensuring accurate and user-friendly results.
- Project can be found: <https://github.com/Wentao-7114/Railway>

Skills

Programming language: C/C++, C#, Python, Java, T-SQL, MySQL, HTML/CSS, JavaScript, MIPS Assembly, OCaml

Tools: SQL Server Integration Service (SSIS), React, Node.js, MongoDB, Postman, Git, Google Cloud Platform (GCP), Unreal Engine