

# Anthony Zheng

952-388-7857 | [ant39844@gmail.com](mailto:ant39844@gmail.com) | [linkedin.com/in/anthony39844](https://linkedin.com/in/anthony39844) | [github.com/anthony39844](https://github.com/anthony39844)

## EDUCATION

---

### University of Minnesota

Minneapolis, MN

*Bachelor of Science in Computer Science - 3.9 GPA (Dean's List 4 Semesters)*

*Sep. 2022 – December 2025*

- **Relevant Coursework** - Data Structures and Algorithms, Database Systems, Operating Systems, Machine Architecture, Program Design and Development, Secure Software Systems, Internet Programming, Artificial Intelligence, Discrete Structures, Linear Algebra, Software Engineering

## EXPERIENCE

---

### Software Developer Intern

June 2024 – August 2024

*Aspen Technology*

*Medina, MN*

- Implemented a tree map component to Voyager using TypeScript, allowing **thousands** of customers to configure and display data in different ways
- Processed data from Aspen Tech's proprietary **DBMS** as well as from **REST APIs** to be compatible with **DevExtreme** components
- Collaborated with the team to triage and resolve tickets, addressing issues from UI inconsistencies to database errors

## PROJECTS

---

### League of Legends Data Tracker (GSB) | *Angular, Python, Flask, Git*

- Utilized Riot Games API to get data on **millions** of players and their match performances
- Developed a front-end UI using Angular to display the data concisely which allows users to improve their gameplay

### Multi-Threaded TCP Server | *C*

- Built a multi-threaded, **TCP** based **HTTP** server capable of serving **20+** client requests concurrently
- Implemented thread synchronization using mutexes and condition variables to ensure atomic queue operations

### Expense Tracker | *React, MongoDB, Node.js, Git*

- Developed a full stack web application to streamline the organization and display of bank transaction data
- Designed and built a **RESTful API** using Node.js and MongoDB to manage and update persistent transaction records
- Implemented back-end logic using Python to read CSV files, reducing data entry time by up to **80%**
- Created an interactive, user-friendly UI with React to improve data accessibility and user experience

### Path Search Visualizer | *React, JavaScript, Git*

- Developed an interactive visualization to demonstrate the functionality of various search algorithms.
- Optimized search algorithms by using different heuristics, increasing performance by **21%**

### Drone Delivery Simulator | *C++, Docker, Git*

- Developed a drone delivery simulation that can deliver **30+** packages using different search algorithms such as A\*, BFS, DFS and Dijkstras
- Implemented a new feature that allows packages to be stolen while adhering to **SOLID** principles and utilizing design patterns such as the factory and observer method
- Optimized search algorithms to reduce battery consumption of drones by **24%**

### Sudoku | *HTML, CSS, JavaScript, Git*

- Used HTML, CSS, and JS to create a dynamic sudoku puzzle interface that can be solved
- Integrated a backtracking algorithm to generate random Sudoku puzzles as well as solve them

## TECHNICAL SKILLS

---

**Languages:** JavaScript/TypeScript, Python, Java, C/C++, HTML/CSS, SQL, UML

**Frameworks:** React, React Native, Node.js, Flask, Angular,

**Technologies:** Git, Docker, VSCode, IntelliJ, MongoDB, Git/Github, Jira, Docker, Postman, Expo