# **Parker Elftmann**

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#### **EDUCATION**

## **Bachelor of Science in Computer Science**

**University of Minnesota, Twin Cities** 

College of Science and Engineering

Coursework: Software Development Process - Program Design & Development - Secure Software Systems

### **PROJECT EXPERIENCE**

## Who said it? - Discord message Guessing Game

Summer 2025

- Built a full-stack web game powered by real messages, integrating data processing, security, and UI design.
- Processed and organized **100k+ messages** into a searchable dataset, enabling randomized message retrieval and gameplay generation.
- Implemented a password-protected authentication system to secure sensitive personal content.
- Designed and deployed a lightweight web app on Render with 100% uptime, supporting fast, replayable rounds with randomized multiple-choice options.

# **Drone Package Delivery Simulation**

Spring 2025

- Built a drone-based package delivery simulation in C++ as part of a 3-person team, adding encrypted deliveries, adversary logic, and real-time data collection.
- Collaborated with teammates to implement 2 features each week, using design patterns
- Wrote 400+ GoogleTest unit tests, improving reliability and catching regressions during rapid iteration.
- Managed version control in GitHub and completed 15+ code reviews; used Docker for deployments.
- Organized and led 10 agile meetings, including sprint planning and retrospectives across two sprints.

# **Agenda LLM RAG Agent**

Fall 2024-Spring 2025

- Developed an AI-powered Retrieval-Augmented Generation (RAG) agent in a team of 5 developers, leveraging MongoDB, Llama, and Pinecone to build RAG infrastructure.
- Automated club roles, to save 5+ hours per semester on agenda planning and knowledge recovery using Python, FastAPI, TypeScript, HTML/CSS, and JavaScript.
- Led the development phase by creating **5** APIs, enabling officers to upload and query **100+** historical documents using natural-language prompts.

#### **WORK EXPERIENCE**

uNote Minneapolis, MN

Software Engineer Intern,

October 2025-Present

- Deployed scalable infrastructure using Docker, AWS S3, and PostgreSQL to support 16,000+ concurrent
  users, integrating AuthO/Keycloak for secure SSO authentication flows.
- Built 10+ RESTful API endpoints in Java using Gradle, for integration with PostgreSQL-backed services.
- Implement 50+ unit and integration tests with JUnit, reducing regressions across authentication and data-access layers.

#### **Skills:**

Programming Languages: Python, Java, C, C++, OCaml, SQL, JavaScript, TypeScript

Web Development: HTML, CSS, Node.js

Tools & Technologies: Git, GDB, RESTful APIs, NoSQL, Docker, AWS, AFL (Fuzz testing)

Databases: MongoDB, Pinecone

Frameworks: FastAPI, Express.js, GoogleTest, JUnit

IDEs: VS Code, IntelliJ, Rider, Visual Studio

Operating Systems: Linux, Windows