

EDUCATION

University of Minnesota-Twin Cities <i>Bachelor of Science, Computer Science</i>	Sep. 2022-Dec. 2025 Minneapolis, MN
<ul style="list-style-type: none"> Cumulative GPA: 3.77/4.0 [Dean's List Award: Fall 2025, Spring 2025, Fall 2024, Spring 2024, Fall 2023, Spring 2023] Coursework: DSA, Software Engineering, Database Systems, Operating Systems, Internet Programming, AI, ML Essentials 	

EXPERIENCE

Undergraduate Teaching Assistant, University of Minnesota	Sep. 2023-Dec. 2025
<ul style="list-style-type: none"> Delivered one-on-one and lab support to 100+ students per semester across Python, Java, and computational linear algebra topics foundational to ML and data workflows, improving student confidence and academic performance across 3+ sections. Designed lab exercises and statistical analyses using Google Colab, NumPy, and Matplotlib, supporting instructional delivery for 300+ assignment submissions. Automated grading workflows for 600+ assessments with Gradescope, enabling faster turnaround & feedback cycles by 20-30%. 	
Test Engineering Intern, IDEAS Revenue Solutions	May 2025-Aug. 2025
<ul style="list-style-type: none"> Built RESTful APIs in Java for 7+ AWS-hosted microservices (e.g., pricing, analytics), integrating SQL/MongoDB validations and Datadog-based telemetry; authored JUnit and Postman test suites for automation. Participated in Agile SDLC processes, resolving 20+ production issues through root-cause analysis and regression testing, boosting service reliability by 30%. Enhanced CI/CD pipelines via GitHub Actions and Terraform; integrated dashboards using Datadog and AWS CloudWatch to monitor 25+ deployments and infrastructure. 	
Software Design Engineer Intern, KEB America, Inc.	May 2024-Aug. 2024
<ul style="list-style-type: none"> Refactored 1,500+ lines of monolithic Python 2.0 code to modular client-server architecture in Python 3.12, boosting maintainability and testability. Designed black-box and integration test suites in Python and C# for 10+ embedded features; increased automated test coverage by 40% and reduced manual QA effort by 25%. Collaborated with cross-functional teams using GitLab, Jira, and Confluence to track and resolve 50+ development and QA tickets across software lifecycle stages. 	
Residence Halls Office Assistant, University of Minnesota	Jan. 2023-May 2025
<ul style="list-style-type: none"> Managed check-ins/outs, key tracking, and front-desk operations for 700+ residents while responding to daily service needs. Maintained organized records for 100+ lost-and-found cases and 1000+ item loans through spreadsheets and check-out databases. 	
Orientation Leader, University of Minnesota	Apr. 2023-Sep. 2023
<ul style="list-style-type: none"> Led daily orientation groups of 15–20 new students through campus tours, presentations, and community-building activities. Helped 7,000+ students by supporting orientation events and assisted 350+ volunteers with training, coordination, and support. 	

PROJECTS

Database LLM Chatbot <i>Python, Git, FastAPI, LangChain, Pydantic, SQLAlchemy</i>	Oct. 2025-Dec. 2025
<ul style="list-style-type: none"> Designed a 5-agent LLM chatbot that turns natural-language questions into validated SQL queries and visualizations across Snowflake, Databricks, PostgreSQL, and MySQL, with 5–10 second response times. Implemented schema-aware RAG logic, SQL safety checks, async execution, Plotly charting, multi-provider LLM support (Gemini APIs), caching, and pooled DB connectors for end-to-end workflows. Reached 80–95% SQL accuracy, blocked unsafe queries, enforced limits, and added full logging + unit tests—cutting manual SQL effort by 70%+ and enabling on-demand analytics from simple user prompts. 	
Distributed Cache System <i>Python, Git, REST APIs</i>	Aug. 2025-Oct. 2025
<ul style="list-style-type: none"> Implemented a production-grade distributed caching system using consistent hashing for automatic data distribution across nodes, achieving 1.07M+ hash ring operations/second with 0.0009ms latency and 23% data movement when scaling. Built HTTP-based cache nodes with RESTful APIs, TTL support, and thread-safe in-memory storage, delivering 649 writes/second and 674 reads/second with 100% hit rate for cached data. Designed smart client library with automatic request routing, fault tolerance, and replication support; demonstrated node failure recovery and graceful degradation in multi-node cluster scenarios across 5 comprehensive demo workflows. 	

SKILLS

Programming Languages: Java, Python, C, C++, Go, C#, SQL, Bash
ML/AI: LangChain, Hugging Face, PyTorch, scikit-learn, NumPy, Pandas, Matplotlib, TensorFlow, Plotly, Prompt Engineering
Systems & Cloud: AWS (S3, Lambda, EC2, ECS, CloudWatch, SNS, Glue), Docker, Linux/Unix, Terraform, Git, GitHub Actions
Databases & Web: MySQL, MongoDB, JUnit, PyTest, Jira, Datadog, REST APIs, JavaScript, HTML/CSS

EXTRA-CURRICULAR

Code The Gap, UMN-Twin Cities <i>Treasurer</i>	Jan. 2023-Dec. 2025 Minneapolis, MN
<ul style="list-style-type: none"> Managed budgets and operations enabling 30+ volunteers to teach Python to K–12 students, expanding outreach to 3 new schools. 	