

CAITLIN ASH

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[LinkedIn](#) | [GitHub](#) | [Portfolio](#)

PROFESSIONAL SUMMARY

Computer Science master's student at DePaul University seeking Summer 2026 Software Engineering internship in backend development or backend-focused full-stack roles. Experience building concurrent systems, full-stack web applications, and REST APIs in Java and JavaScript.

DePaul University Chicago - Chicago, IL

Master of Science in Computer Science | Expected: July 2027

Relevant Coursework: Distributed Systems, Computer Systems, Data Structures & Algorithms

Washington University St. Louis - St. Louis, MO

Certificate in Full Stack Web Development | June 2023 - December 2023

Loyola University Chicago - Chicago, IL

Bachelor of Science in Psychology | August 2019 - May 2023 | *Dean's List*

TECHNICAL SKILLS

Languages: Java, JavaScript, SQL

Backend Development: Spring Boot, Node.js, Express.js, REST API Design

Databases: PostgreSQL, MySQL, Database Design

Frontend-UI: React.js, HTML/CSS, Responsive Web Development

Developer Tools: Git, Docker, Maven, Linux, GitHub Actions

Systems: Concurrent Systems, Multi-threading, Socket Programming, Client-Server Architecture, Performance Optimization

PROJECTS

Concurrent File Retrieval System | Java, Multi-threading, Socket Programming | [GitHub](#)

- Implemented multi-threaded client-server architecture with dispatcher-worker thread pool pattern handling concurrent client connections via TCP/IP sockets
- Engineered thread-safe inverted index with synchronization primitives for concurrent read/write operations
- Achieved ~54 MB/s indexing throughput processing 2.25 GB dataset through systematic profiling and optimization
- Developed and tested across Linux and macOS environments to validate cross-platform performance

The Tech Blog | JavaScript, Node.js, Express.js, MySQL | [GitHub](#) | [Live Demo](#)

- Developed RESTful API with Node.js and Express.js following MVC architecture; implemented user authentication and session management
- Built responsive frontend with Handlebars.js templating engine and MySQL database for persistent content storage
- Implemented comprehensive test suite achieving 86% code coverage with Jest and Supertest for API endpoint validation
- Deployed with Docker containerization and automated CI/CD pipeline using GitHub Actions for continuous deployment to Heroku