

REEWIN SHI

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Education

University of Michigan

College of Engineering; Stephen M. Ross School of Business

B.S. in Computer Science; Minor in Business

Activities & Programs: Atlas Digital, Alternative Investments Committee, Phi Gamma Nu Professional Business Fraternity, Jane Street INSIGHT(Strategy & Product)

Coursework: Data Structures and Algorithms, Operating Systems, Web Systems, Object Oriented Programming

Expected Graduation: May 2028

GPA: 3.74/4.00

Experience

Capital One

Summer 2026

Software Engineering Intern

Chicago, Illinois

- Built a plug-and-play rules engine in Java and Spring Boot that evaluates credit card transactions against configurable rules, deployed on AWS ECS; managed feature allowlists, JSON rule configurations, and Docker container builds
- Refactored data models and OpenTelemetry metrics/tracing pipelines for a rule-retrieval service, keeping response times well within its latency target with zero failed requests across extended high-volume load testing before release
- Built component and live-dependency BDD test suites (RestAssured/Cucumber) on an in-memory H2 database, achieving 93.1% test coverage with automated teardown to speed up releases from development to performance testing

University of Michigan Information and Technology Services

May 2025 – August 2025

Business Systems Analyst, Project Manager

Ann Arbor, Michigan

- Spearheaded Request for Proposal(RFP) creation worth \$100,000+ through stakeholder interviews and documentation to replace outdated billing and work order management software, aligning with industry standards, and enhancing security
- Led team of 7 interns to enhance 20 project management templates by testing accessibility and AI-readability with Chatbot and Grackle and interviewing 50+ University users, increasing project execution and template awareness

Atlas Digital Consulting

January 2025 – Present

Software Analyst

Ann Arbor, Michigan

- Engineered AI pipeline using GPT API to extract and generate product catalogs and bill of materials for 89 producers, enabling a package recycling client to verify reported packaging data against publicly available information
- Designed and implemented homepage using JavaScript, React, Tailwind CSS for medical startup; collaborated closely with client through meetings, final work was selected over 25 competing developers and deployed to 200+ users
- Developed email generator using Chat-GPT API and Apollo API to create process-specific emails and centralize recruiter information, streamlining the recruitment process for 100+ members and improving recruiter follow-up rate by 40%

180 Degrees Consulting

January 2025 – Present

Project Manager, Software Analyst

Ann Arbor, Michigan

- Led team of 4 analysts as Project Manager for non-profit impact fund, delivering community engagement and investor stewardship playbooks, a React/Supabase tracking dashboard, and a data-driven survey strategy to optimize outreach
- Built Flask backend to process user inputs and apply profit-margin logic, used SQL queries to retrieve and structure property and pricing data, enabling real-time pricing and reducing manual calculation time by 50% for 30+ agents

Projects

Virtual Memory Pager

Winter 2026

- Implemented virtual memory pager managing swap and file-backed pages across multiple processes, supporting copy-on-write sharing, zero page optimization, clock sweep eviction to minimize disk I/O and physical memory usage
- Designed page tracking data structures to handle forked processes with shared physical frames, lazy allocation to defer physical memory assignment until first write, and demand paging to minimize unnecessary disk I/O across pages

Multi-threaded File Server

Winter 2026

- Built network file server supporting concurrent read/write/create/delete operations on a hierarchical file system, using hand-over-hand locking with upgradable reader/writer locks to maximize parallelism while preventing race conditions
- Implemented socket-based client-server communication with untrusted input sanitization, per-inode mutex management, and crash-consistent disk write ordering across an arbitrary number of concurrent client threads

Technical Skills & Additional

- Languages: Python, C++, Java, HTML, JavaScript, Typescript
- Frameworks/Libraries/Software: Git, React, Flask, AWS(ECS, CloudFormation, CloudWatch), Next.js, CI/CD Pipelines, Artifactory, NewRelic, Firebase
- Interests: Veteran Monopoly Player, Retired Basketball Player, Principal Flutist, Traditional Chinese Dancer, Traveling