

Enoch Zhu

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EDUCATION

University of Texas at Austin

Austin, Texas

B.S. in Computer Science

Expected Graduation: May 2028

- o **Related Coursework:** Data Structures & Algorithms, Object-Oriented Programming, Computer Architecture, Operating Systems, Data Science & Statistical Computing, Elements of Statistical Machine Learning, Linear Algebra

SKILLS

Programming: Python, C, C++, Java, JavaScript, TypeScript, HTML, CSS, R

Frameworks & Libraries: Next.js, Node.js, Vite, Tailwind, React Native, Expo, Apache Solr, PostgreSQL, Supabase, Firebase

Developer Tools: NPM, PNPM, Deno, Bun, Docker, Linux, Unix, Git, Vercel, Netlify, Jira, Cloudflare, Nginx, Portainer, Tailscale

Certifications: CompTIA A+ (2023), GIAC Foundational Cybersecurity Technologies (2024)

EXPERIENCE

Icelis Global

Jun 2025 – Aug 2025

Software Engineering Intern

Doha, Qatar (Remote)

- **Streamlined payroll operations for 50+ users** by architecting and deploying a custom time-tracking application with React, Mantine UI, and Firebase, enhancing workforce management efficiency and team productivity
- **Automated 70% of the GRI reporting workflow** by developing a full-stack ESG reporting platform using Next.js and LlamaIndex to ingest and generate the creation of GRI-compliant reports for companies without manual intervention
- **Reduced manual search time by 40%** by engineering a Retrieval Augmented Generation (RAG) chatbot that automates data extraction from **100+ complex regulatory PDFs**, accelerating report generation workflows

Bell Flight

Aug 2023 – May 2024

Software Engineering Intern

Fort Worth, Texas

- **Reduced reindexing time by 90%** by executing the migration of a legacy Apache Solr and .NET app to a modern production server and developing a multi-threaded indexing method that ensured zero downtime
- **Eliminated manual processing of 1,000+ records** by devising a Python-based automation solution for customer access updates, significantly lowering technical debt and revoking unneeded permissions
- **Improved agent productivity by 30%** by designing and delivering a comprehensive training presentation on Cisco and Salesforce integration to over 300 agents and supervisors, driving overall customer satisfaction

PROJECTS

SBI Website | Next.js, React, TypeScript, Tailwind CSS, Supabase, PostgreSQL

Nov 2024 - Current

- **Increased average session duration by 40%** by architecting a high-performance and modern frontend with Next.js App Router, Tailwind CSS, and scroll-driven Motion animations that significantly enhanced visual storytelling
- **Secured 100% of member data** by implementing a robust authentication system using Supabase Auth and Next.js Middleware to enforce strict server-side validation, session persistence, and protected routes

Bell Pepper | Expo, React Native, TypeScript, Supabase, PostgreSQL, Stripe Connect

Sep 2025 - Current

- **Empowered local farmers to digitize inventory** by building a cross-platform mobile marketplace that replaced manual sales logs and inventory synchronization with a centralized digital dashboard, **cutting administrative time by 40%**
- **Reduced database query time by 60%** by engineering a normalized PostgreSQL schema with Row Level Security (RLS) policies that strictly enforce role-based access for farmers and customers, providing an optimized shopping experience

Private Cloud Infrastructure | Linux, Docker, Cloudflare, Nginx, SSL, Tailscale, Wireguard

Jun 2024 - Current

- **Achieved secure, zero-trust remote access** by architecting a mesh VPN network with Tailscale, Wireguard and Nginx Proxy Manager, enabling encrypted connections to internal services without exposing ports to the public web
- **Regained digital sovereignty over 4TB+ of assets** by architecting a self-hosted Linux microservices stack (Immich, Jellyfin, Paperless-ngx) that eliminates third-party tracking and saves **\$500/year** in SaaS subscription fees

ACTIVITIES AND LEADERSHIP

Sustainable Building Initiative (SBI)

Austin, Texas

Director of External Technologies

Aug 2024 – Current

- Led a 12-person technology team, delivering 3+ software tools that serve 5 departments and 70+ student members
- Accelerated project deliveries by 50% for a \$25M+ project portfolio by developing automation tools