

Maegan Johnson

Okemos, MI 48864 • (616) 502 6022
m.johnson0271@gmail.com

[linkedin.com/in/maejoh](https://www.linkedin.com/in/maejoh)
github.com/maejoh
maejoh.io

Full-Stack Software Engineer

5+ years of full-stack experience (Python, TypeScript, React) across SaaS, defense, and AI-native development. Strengths include API design and ownership, cross-team technical coordination, and technical communication, from customer-facing developer webinars to internal documentation that engineers still reference years later.

Projects

Portfolio website – maejoh.io, built with WordPress and raw HTML/CSS. Includes a home page, portfolio page, career overview, and contact information.

‘Technical Bookshelf’ Live demo – AI-native web app with public source code and detailed README files at github.com/maejoh/demos. Typescript, Next.js, React, and Tailwind, a Redis instance in Upstash, CI/CD through GitHub and Vercel, an epub data pipeline that uses both the Google Books API and the Anthropic API.

Garden binders – Detailed, hand-written PDFs of land science and history for specific plots of land in Michigan (see website portfolio).

Top Skills

Full-Stack Engineering — TypeScript, React, Next.js, Python, Node.js, GraphQL, REST APIs, Redis, SQL/PostgreSQL, AWS, CI/CD, Git

AI-Native Development — Anthropic API, prompt engineering, multi-stage AI pipeline design

API Design & Technical Ownership — Customer-facing API design through deployment; technical specs, multi-team coordination, developer webinars, production monitoring

Documentation & Codebase Health — Framework documentation, onboarding materials, technical specs; work still referenced years later

Extended Stack — Rust, Java, Flutter, C#, Docker, Vercel, Azure, JIRA, Agile

Work Experience

Remote, Michigan

Independent Study

01/2025-Present

Built and deployed BookShelf — a full-stack AI-native web application (Next.js, TypeScript, React, Redis, Anthropic API) featuring a multi-stage AI tagging pipeline, a Python epub processing pipeline, and CI/CD via GitHub and Vercel. Conducted independent study of large language models and prompt engineering. Currently pursuing MSU Extension Master Gardener certification through formal coursework and volunteer training.

Remote, San Francisco

Software Engineer at Benchling

08/2022-01/2025

- Full-stack engineer (Python, TypeScript, React, GraphQL) on Benchling's Electronic Lab Notebook, FDA-adjacent SaaS used by 500+ pharma and biotech teams

- Data Input team, focused on the inline notebook tables where users entered and viewed their experiment data and could connect that data with the rest of the software suite

- Led the development of customer-facing Table APIs for reading, inserting, and updating tables, from design through deployment, including documentation and a developer webinar for ~50 customers
- Designed the row delegate column type end-to-end — a novel solution enabling per-row type validation in structured tables; validated through senior architecture review and adopted across teams
- Authored comprehensive documentation of the Python patcher framework for notebook entry versioning and delta writes; engineers continued referencing for years

Remote, Ann Arbor

Software Engineer at Soar Technology

05/2020-08/2022

- Full-stack engineer across multiple simultaneous DARPA contracts in diverse stacks (Java, Python, React, TypeScript, Rust, Flutter); held active Secret clearance
- Built and packaged a React/TypeScript app as an npm module for integration into an existing government system; learned rollup/webpack to meet the packaging constraint
- Primary developer of a Flutter patient-handoff training app, including speech-to-text with synonym mapping for automated trainee evaluation; rewrote non-functional prior code over a single weekend to save a major client demo
- Built Rust sensor coverage tracking for unmanned vehicle patrol simulations: GPS position, sensor range, and line-of-sight computation rendered as post-simulation PNG terrain overlays

Remote, Phoenix

ASP.NET C# Developer at Infosol

06/2019-12/2019

Wrote batch programs using C#, ASP.NET, and SQL for a database of traffic tickets for a New York municipality. Created a small utility library to give a template for future batch programs to improve debugging and monitoring, and improved security on previously written batch programs, including fixes for an existing SQL injection vulnerability.

East Lansing, Michigan

Lead Developer at MSU College of Nursing

04/2019-08/2019

Sole developer on TAMI (Technology Assisted Motivational Interviewer), a grant-funded pre-LLM conversational AI behavioral health tool. Identified HIPAA incompatibilities with the initial Google Actions implementation; researched and advocated for an on-device alternative (Mycroft on Raspberry Pi). Translated 20+ pages of branching clinical interview scripts into Python dialogue logic; left with the project at clinical trial preparation stage.

East Lansing, Michigan

Undergraduate TA at MSU College of Engineering

01/2019-05/2019

Selected by the professor to TA CSE 320 (Computer Organization and Architecture — logic gates to machine language); answered student questions, held office hours, and graded coursework.

Education

Michigan State University | B.S. Computer Science, 2020 | East Lansing, MI

Electives

Operating Systems | Computer Networks | Introduction to Artificial Intelligence | Translation of Programming Languages (Compilers) | Web App Architecture and Development | Database Systems