## Jonas Groening

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#### Education

University of Michigan, Ann Arbor

April 2026

4.0

Coursework: Discrete Math, Prog. and Intro Data Structures, Linear Algebra

### **Experience**

### Quarry Videos, Ann Arbor, MI

B.S.E, Computer Science

April 2023 - August 2023

Software Engineer

- Build an interactive fullstack website with Next.js, React, and Tailwind, amassing hundreds of users
- Develop and host a centralized logging service with Go and jQuery, allowing the team to find 40% more bugs monthly
- Utilize RabbitMQ to build a task system for computationally intensive work, allowing the API to become 90% more responsive
- Use Jenkins, Terraform, and Docker to set up a CI/CD pipeline that saves ~30 minutes per deployment
- Write a custom Prisma adapter for MongoDB that improves session data retrieval times by 500%

#### CriTech Research, Inc., Saline, MI

May 2023 - August 2023

Software Engineering Intern

- Create software with OpenCV and Python to combine x-ray images into a 3-dimensional model, allowing medical professionals to analyze bone anomalies
- Develop a CI/CD pipeline using Jenkins to automate unit and black-box testing saving ~5 hours per week
- Extend and refactor a C# .NET backend to create a more robust and secure API with fewer vulnerabilities
- Develop and execute test procedures to ensure the safety and quality of medical software, aiding in the process of ISO certification

# **Technologies and Skills**

Languages: Go, Python, Rust, Typescript, C#, C++, Java, SQL, Javascript

Web Frameworks: NextJS, React, Django, .NET, Flask, Fiber

Databases: MySQL, MongoDB, Redis

Misc: Git, Linux, NumPy, Docker, Terraform, OpenCV, Jenkins, Pandas, GraphQL

# **Projects**

**Q**Logger

June 2023 - July 2023

- Centralized logging service built with Golang and Fiber with an interactive Svelte frontend to view, filter, and aggregate logs
- Containerize the application with Docker to simplify self-hosting

QuickPipes

March 2023 - April 2023

• Rewrite a terminal screensaver in Rust that runs at 10% cpu usage compared to the original, pipes.sh

N-Body

March 2022 - April 2022

• Explore n-body simulations efficiently using a custom implemented Quad-tree, written in Rust