

Emil Sayahi

Oxford, OH · (513) 484-0972 · limesayahi@gmail.com

Systems programmer & web developer with experience building & contributing to world-class software ecosystems such as GNOME and the IndieWeb. Knowledgeable in low-level programming, interested in building reliable, fast, memory-safe software that scales.

Experience

Hearts

Cincinnati, OH

Technology Lead

August 2024 - Present

- Led feature development on 5-person backend team, using Deno, PostgreSQL, Supabase, and Google Cloud Platform.
- Created GitHub Actions CI/CD deployment pipelines, implemented JWT-based authentication.
- Negotiated with vendors, represented technical operations at conferences & investor meetings.

Protiviti

Boston, MA

Technology Consulting Intern

May 2024 - August 2024

- Aided 2 senior consultants for automotive client concerned with regulatory compliance requiring business platform transformation (BPT) after \$340m acquisition.
- Developed SAP BusinessObjects reports and universes in Web Intelligence and Information Design Tool as part of reimplementing a major client dashboard.
- Discovered & resolved recurring data loss among consulting team by introducing version-control procedures.
- Automated creation of certain client deliverables with Python scripts, eliminating 4+ hours of deliverable creation & validation.

HCLSoftware

Remote

Software Engineer Intern

May 2023 - August 2023

- Identified & resolved bugs, and designed & built UI elements, as developer in 10-person core team for HCL Accelerate and IBM UrbanCode Velocity products.
- Transitioned product from Docker Compose V1 to V2. Migrated portions of React frontend from class components to function components.
- Developed frontend of new major customer-facing feature that had previously been delayed by 3+ months.

Miami University, Department of Computer Science & Software Engineering

Oxford, OH

Teaching Assistant

August 2022 - December 2023

- Assisted with instruction of Systems 1 and Fundamentals of Programming courses at Miami University; material consisted of object-oriented programming, Java, C/C++, introductory networking, introduction to computer architecture, and introduction to relational databases & SQL.
- Graded assignments, guided students in lab sessions, and held weekly two-hour help sessions.

Miami University, IT Services

Oxford, OH

Software Engineer Intern

May 2022 - May 2024

- Developed integrations with applications in Miami University's IT Service Management ecosystems using TeamDynamix iPaaS and Python scripts.
- Created internal tool to manage data associated with 62+ university-owned buildings, eliminating the need to purchase updates for facility management software & 2+ weeks of manual database changes every 16 weeks.
- Created internal tool to manage university-owned hardware, improving record-keeping & accountability.
- Authored documentation of best practices, internal procedures, and technical standards; onboarded new engineers.
- Presented at the 2023 Ohio Higher Education Computing Council (OHECC) Conference at Wright State University on ITSM best practices for institutions of higher education.

Miami University, Office of Government Relations

Oxford, OH

Government Relations Intern

August 2021 - May 2024

- Advocated for the interests of Miami University in meetings with Ohio State Senators & Representatives, the Chancellor of the Ohio Department of Higher Education, and legislative aides of US Representatives.
- Advocated for increased funding for the Federal Pell Grant Program, Ohio College Opportunity Grant (OCOG), Ohio State Share of Instruction (SSI), and the Choose Ohio First (COF) Scholarship Program.
- Supported presidents, government relations directors, and students of Inter-University Council of Ohio members in opposing state-level legislation harmful to higher education.

Projects & Presentations

Introduction to Quantum Machine Learning

November 2023

Lecture given at the Miami University Physics Department seminar on introductory quantum computing, machine learning, and the intersection of the two fields.

Oku

May 2023 - Present

Open-source web browser, peer-to-peer protocol, & social bookmarking system. Recipient of the NLnet NGIO Entrust grant as part of the European Commission's Next Generation Internet initiative.

Automation in IT Service Management

May 2023

Talk given at the 2023 Ohio Higher Education Computing Council (OHECC) conference detailing technical & administrative best practices for automating ITSM operations in higher education institutions.

Analysis of Potential Malicious Strategies toward Bit-Exchange with IPFS

April 2022 - August 2022

Research project investigating methods to disrupt network communication between nodes in a private IPFS network, funded through Miami University's Undergraduate Summer Scholars Program.

Education

Miami University

Oxford, OH

Bachelor of Science in Computer Science — GPA: 3.81 (magna cum laude)

August 2021 - May 2024

Skills

Languages:

Rust, C#, JavaScript, Python, Java, PHP

Technologies:

Linux, Git, GitHub Workflows, Postgres, MySQL, GraphQL, React, MongoDB, Docker, Deno, Node.js, HTML, CSS

Techniques & Methodologies:

Agile, Scrum, unit testing, end-to-end (E2E) testing

Awards & Certifications

Intellectual and Cultural Leadership

May 2024

Commendation in Undergraduate Research

May 2023

Dean's List

Fall 2023, Fall 2022, Spring 2022, Fall 2021

Choose Ohio First Machine Learning Scholarship

August 2023, August 2022, August 2021

Bertelsmann Technology Scholarship Program

December 2021