

Ethan Gilmore

ethanmckgilmore@gmail.com | (775) 219-0024 | github.com/ethangilmore | linkedin.com/in/ethangilmore

Experience

Full Stack Software Developer - OBEO

Jan 2023 - Present

- Built and maintained **REST APIs** and backend services in **Java** and **Node.js** for order fulfillment, billing, payment method management, and asset tracking
- Led development of a **React Native** mobile app for asset logistics, enabling partners to track and fulfill over **\$250K** in client orders
- Developed reusable UI components for web and mobile using **JavaScript**, **HTML**, and **CSS**, delivering clean and consistent user experiences across platforms
- Delivered secure, production-grade code backed by comprehensive **unit and integration tests**, ensuring system stability and **80%** test coverage
- Optimized **SQL** queries for complex data retrieval to ensure performant backend operations

Research Assistant - Funai Lab, University of Utah

May 2023 - Dec 2024

- Built automated pipelines in **Python** to process and visualize proteomics datasets which were used to create an **award-winning** poster for the American Aging Association conference
- Fine-tuned a **PyTorch** deep learning model for muscle cell segmentation, improving accuracy by **~10%** and saving over **100 hours** of manual labeling time
- Developed a custom **ImageJ** plugin to measure biological properties of cells including volume and dye intensity, standardizing quantification across experiments

Education

BS in Computer Science - University of Utah College of Engineering

May 2025

Relevant Coursework: Data Structures, Algorithms, Computer Architecture, Software Development, Scientific Computing, Natural Language Processing, Deep Learning, Image Processing, Compilers

BS in Applied Mathematics - University of Utah College of Science

May 2025

Relevant Coursework: Discrete Mathematics, Calculus, Linear Algebra, Data Mining, Probability, Statistics, Differential Equations, Physics, Real Analysis, Complex Analysis, Numerical Methods

Projects

Compiler - C++17, x86-64, Make

JPLC is a compiler for the JPL programming language, written in C++17 employing modern C++ techniques. It features a handcrafted recursive descent parser and a complete static type checker. JPLC is able to transpile from JPL to C or compile down to x86 assembly.

Mobile App - TypeScript, React Native, C#, ASP.NET

BeThere is a cross-platform photo-sharing mobile app built with React Native, featuring a modern, sleek, and intuitive UI. The project integrates AWS services such as S3 for media storage, EC2 for backend hosting, and RDS for database management.

Machine Learning Library - Python, NumPy

MicroMLP is a lightweight Python module for creating and training feed-forward neural networks with minimal dependencies. This project implements core machine learning algorithms from scratch including backpropagation and gradient-based optimization methods.

Skills

Languages - Python, JavaScript, TypeScript, Java, C#, C++, C, SQL, MATLAB, R, HTML & CSS

Technologies - Git, GitHub, GitLab, React, React Native, Docker, AWS, Linux, Pandas, PyTorch