Joshua Fink

Software Engineer | Entrepreneur | Problem Solver

A California oshfink.me in /fink-joshua



University of Michigan, College of Engineering

B.S.E. Computer Science (Magna Cum Laude), Engineering Honors Program

Ann Arbor, MI

Hope College

Mathematics Minor, Dual-Enrolled High School Student, Pi Mu Epsilon Mathematics Honor Society

Apr. 2018 Holland, MI

Sept. 2022

Experience

Software Engineer II Jan. 2025 - Present

Meta Superintelligence Labs

Menlo Park, CA

- > Built a high-performance Go/C++ storage driver linking Distribution to internal blob storage, enabling FAIR researchers to store tens of thousands of Docker images for reinforcement learning runs (also cut podman search latency by 97%)
- > Integrated an LLM-based semantic search service into an internal data tool and launched interactive onboarding tutorial shown company-wide
- > Added artifact rendering and live UI previews to an internal browser-based coding agent, letting developers inspect interface changes without opening VS Code
- > Improved agent workflows and MCP tooling for parsing Figma abstract syntax trees to generate UI/UX code; created an icon-matching MCP tool that raised match accuracy from 54% to 98.2%
- > Currently extending an LLM-driven Chrome extension to capture inline React component comments on internal sites akin to Lovable and generate actionable commits via a coding agent

Mar. 2024 - Dec. 2024 Software Engineer I

GEICO

> Monitored and supported RHEL 7.9 SAS Grid operations, eliminating 75+ service tickets from the backlog within the first two months

- > Implemented Azure Databricks monitoring solution, reducing monthly training and inference costs by 50%
- > Engineered automated Snowflake OAuth workflows for Python, R, and SAS environments
- > Taught weekly Python Data Structures and Algorithms course to 50 coworkers

Founder Oct. 2022 - Dec. 2024 Ghana | Chapel Hill, NC

ClinicPal

> Launched humanitarian clinical assistant software organization with nonprofit Kybele Worldwide to enhance neonatal care globally

- > Crafted cross-platform Flutter/Firebase iOS and Android application to help clinicians adopt best practices
- > Actively lowering infant mortality by 15% in 4 regional and 20 district hospitals, representing 25% of Ghana's national hospital system

Process Improvement Software Engineer (Engineering Honors Capstone)

May 2022 - Sept. 2022 Atlanta, GA

Remote | Chevy Chase, MD

BrandSafway

- > Performed quantitative analysis of North American Scaffolding Division processes (130 branches, 8000+ jobs, \$1.25b+ fleet value) to identify savings opportunities
- > Optimized fulfillment network with Prefect data pipeline, integrating Google Cloud Platform APIs, Gurobi linear programming, and time-series forecasting with company SQL data to improve return on assets
- > Implemented strategies projected to deliver \$7.5m in savings and 1.4% EBITDA growth over three years

Machine Learning Researcher

May 2021 - Aug. 2021

Big Data Summer Institute, University of Michigan School of Public Health

Ann Arbor, MI

- > With NLP methods (K-medioid clustering, LDA clustering, TF-IDF, stemming, VADER, BERT), researched connection between COVID-19 vaccine incentives and resulting topics and sentiments on Twitter in Python (PyTorch, Scikit-Learn) and R
- > Constructed RShiny application to provide easy interface to apply datasets to team's research

Co-Founder and CTO Aug. 2019 - Oct. 2022

Opal Medical Technologies

Troy, MI

- > Developed Flutter healthcare informatics application to streamline operations during emergency pediatric codes after gathering input from physicians, nurses, and pharmacists
- > Won \$10,000 in equity-free seed funding from Pinkert Healthcare Accelerator, rebranded as ClinicPal after Forbes 30 Under 30 lead

Departmental Ambassador

Aug. 2020 - Dec. 2021

University of Michigan College of Engineering, Engineering 110

Ann Arbor, MI

> Co-facilitated two weekly discussion sections, led computer science info sessions, and hosted office hours for freshman engineers

