Yacob S. **Alemneh**

· SOFTWARE ENGINEER ·

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Summary

Software Developer with 6+ years of experience creating high-performance, user-centric applications and a proven track record of leading scalable, cross-platform solutions for diverse clients. Proficient in both mobile and web development, with hands-on experience in backend development and working with modern architectures. Self-motivated, strong collaborator, communicator, and lifelong learner passionate about utilizing modern technologies to build impactful applications, optimize processes, and drive team success in cross-functional teams.

Education

University of Kentucky   *Lexington, Kentucky*

M.S. IN QUANTITATIVE FINANCE   *2023*

B.S. IN COMPUTER SCIENCE   *2019*

Experience

Libretto.fm

SENIOR SOFTWARE ENGINEER   *2024 - Present*

- Developed a **cross-platform** mobile application using Flutter, implementing clean architecture and BLoC for state management, while integrating **real-time recording** with the **LiveKit SDK**.
- Engineered an **AI-powered content extraction system** utilizing **Python**, **Flask**, and **Large Language Models (LLMs)**, applying **Retrieval Augmented Generation (RAG)** techniques and vector embeddings.
- Optimized transcript indexing for **efficient LLM prompt-based clip creation**, significantly improving search performance and retrieval times.
- Maintained and expanded video processing back-end using **Go**, improving the system's capability to handle complex media operations at scale by utilizing microservices.
- Expanded and updated the core product, a web application built with **React**, contributing to a comprehensive UI/UX overhaul, implementing user-requested features, and upgrading the built-in video editor with AI-powered enhancements.

E8 Labs

TECHNICAL PRODUCT MANAGER   *2023 - 2024*

- Managed a **20-person cross-functional team** across complex, multi-stage projects for diverse clients, consistently delivering on time and within budget.
- Closed **$100k+** in deals by effectively communicating technical aspects to non-technical clients, bridging the gap between engineering and business requirements.
- Developed an internal resource management application using **Node.js**, **Express.js**, and **TypeScript**, integrating APIs from ClickUp and Jira, and utilizing **Google Cloud Platform** with **MongoDB** for data storage.
- Managed project resource allocation, tracked costs, and estimated future demand across portfolio projects, improving allocation efficiency and visibility.

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SENIOR SOFTWARE ENGINEER   *2018 - 2023*

- Participated in the development of **35+ mobile and web applications** for Fortune 500 companies and startups. Key clients included Koinage, Evolve, IGAD and Freshcut.
- Contributed to **NuBank's strategic migration** from native iOS and Android to **Flutter**, improving user experience for **65+ million users** across Brazil, Mexico, and Colombia.
- Developed a scalable e-commerce platform for **Unilever East Africa** using **Flask** and **PostgreSQL**, implementing automated data management tools that enhanced data quality and reduced manual errors.
- Designed and developed YeneHealth's cross-platform mobile application, FemTech service provider, utilizing **Flutter**, **Firebase**, and **a Node.js** serivice layer. Shipped completed health-tech application to the Apple App Store and Google Play Store.

Projects

memorable.app

LEAD ENGINEER   *2022 - 2024*

- Developed AI-powered learning platform, reaching **40,000 MAU within 90 days**, demonstrating ability to apply AI solutions to real-world educational challenges in the developing world.
- Utilized **Neo4j and Pinecone** to implement knowledge representation system that enabled the creation of personalized learning paths that were augmented with LLM-based content generation for dynamic and student specific learning experiences.

Skills

Languages & Frameworks   Python, Dart, JavaScript, TypeScript, Go, Flutter, React Native, React, Node.js, Express, Flask, BLoC, Redux

AI, Data & Cloud   LLMs, RAG, NumPy, Scikit-Learn, GCP, AWS, Firebase, Docker, REST, GraphQL, WebSocket, WebRTC

Databases & Tools   SQL, NoSQL, PostgreSQL, Firebase, Git, Jira, Agile, TDD, CI/CD