Melaku Asefa

SKILLS

Programming

TypeScript/JavaScript, SQL, PHP, Python

Web Development

Vue.js, React, HTML, SPA, CSS Preprocessors (Sass/PostCSS)

Backend & APIs

Node.js, REST/GraphQL

Databases

PostgreSQL optimization and Data migrations, NoSQL/DynamoDB, S3, Amazon RDS

Cloud & DevOps

Cloud-Native Architecture (AWS, Azure), Containerization (Docker), CI/CD Pipelines, IaC (AWS CDK, Terraform), Serverless

Strategy & Leadership

Technology Roadmapping, Team Leadership, Distributed Team Collaboration

EDUCATION

BSc in Electrical Engineering (Control), CGPA: 3.64/4, Graduated with great distinction

Adama Science and Technology University

CONTACT

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📞 +251977052924

in linkedin.com/in/melakuzewduasefa

○ github.com/melaku-z

🔗 My Blog

🌐 Addis Ababa, Ethiopia

ABOUT

Fullstack engineer with 8+ years of experience delivering scalable web applications and cloud-native solutions. Strong expertise in TypeScript for web and Node.js, cross-platform mobile, and AWS. Experienced in CI/CD, containerization, and system architecture. Proven track record in distributed teams building secure, reliable, and maintainable software for startups and enterprise clients.

WORK EXPERIENCE

VP Technology
Apr 2021 - Present

Uplancer LLC (Remote) | Columbus, Ohio, USA

- Built and maintained fullstack web and mobile applications with TypeScript, React, Vue, Node.js and AWS, used by external customers and internal staff.
- Designed and optimized PostgreSQL schemas and queries to handle high transaction volumes with strong concurrency performance.
- Developed robust CI/CD pipelines and automated test suites, reducing manual interventions by 80% and streamlining deployments.
- Architected and implemented highly scalable backend systems using AWS, TypeScript, and PostgreSQL.
- Integrated third-party APIs and payment systems (Stripe, Plaid, Slack), strengthening data accuracy and reliability.
- Mentored and coached engineering staff, boosting productivity and reducing turnover.
- Evaluated and integrated emerging technologies, strengthening system security and ensuring compliance.
- Collaborated effectively with distributed design and development teams to translate design concepts into functional and visually appealing interfaces.

Chief Technology Officer
Jan 2020 - Apr 2021

Uplancer, Inc. (Remote) | Columbus, Ohio, USA

- Built and maintained responsive SPAs using Vue, React, TypeScript, and GraphQL for large-scale production systems.
- Directed backend engineering for web and mobile platforms on AWS.
- Developed resilient, serverless systems with high uptime to handle production traffic.

Electrical Engineer Positions
Oct 2014 - Sep 2019

dVentus Technologies | Ethiopia

- Developed test automation scripts with database integration, improving production line hardware testing efficiency by 50%.
- Programmed firmware for embedded systems using C.

PROJECTS

Treehouse Community

An iOS app with a positivity-focused community dedicated to promoting meaningful connections, uplifting content, and respectful interactions.

 App Store Link

- Implemented secure backend API services and data models using TypeScript/Node.js to manage authentication, content moderation, and user subscriptions.
- Deployed and managed backend infrastructure on AWS, handled using AWS CDK's IaC tools, architecting for scalability and high reliability.
- Collaborated with the product team to implement moderation mechanisms, including invite-only access and community-driven content rating.
- Integrated Amazon CloudWatch for application monitoring, observability, and alerting.

ALIM

A cross-platform (Web, iOS, Android) micro-donation app that enables users to contribute to non-profits by rounding up everyday credit/debit card purchases.

 Home Page | App Store | Project Case Study

- Architected a financial micro-donation platform from the ground up using Node.js and PostgreSQL, with a complete CI/CD workflow on AWS.
- Built the complete web-based frontend using Vue.js, interfacing with the type-safe tRPC backend to deliver a seamless user experience.
- Implemented async state management with TanStack Query to ensure predictable UI behavior and efficient data handling.
- Engineered automated CI/CD pipelines on AWS to streamline build, testing, and deployment processes.
- Designed and implemented the PostgreSQL database schema and data models.

Respirator Fit Testing Portal

A HIPAA-compliant web portal to handle a respirator fit test health program.

 Home Page | Project Case Study

- Created intuitive web dashboards for healthcare professionals and patients, featuring robust and compliant reporting capabilities.
- Managed end-to-end application hosting and maintenance on the Microsoft Azure cloud platform.
- Designed and built a HIPAA-compliant backend on Azure for managing health data and generating compliance reports.
- Created responsive, pixel-perfect user interfaces using TailwindCSS for cross-browser compatibility.

Open source calendar converter

Open-source JavaScript libraries and web application for converting dates to and from local calendar.

 GitHub | Demo App | NPM Package

- Authored and actively maintain open-source Vue.js components and TypeScript libraries for calendar conversion, distributed via npm.
- Created demonstration web (using Vue.js) and Android applications to showcase the library's features and simplify integration for developers.