

Arshia Eskandari

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Summary

Rust Backend & Systems Developer focused on high-performance, memory-safe systems. Maintainer of OxiMod, a MongoDB ODM enabling type-safe, asynchronous data access and scalable applications.

Experience

Software Engineer | OxiMod (Open Source Rust Crate) | Waterloo, ON | Feb 2025 – Present

- Architected [OxiMod](#), an open-source MongoDB ODM for Rust, achieving 6,500+ downloads.
- Integrated async schema modeling with Tokio, reducing repetitive boilerplate by 70%.
- Implemented index validation and async-safe initialization, guaranteeing race-free index setup.
- Designed 120+ automated tests covering core logic, preventing regressions across releases.
- Reduced execution time by 20% via profiling runtime with flamegraphs and identifying bottlenecks.

Software Developer | Freelance | Waterloo, ON | May 2024 – Jan 2025

- Architected a dynamic [portfolio website](#) using Next.js, including an admin panel to manage content.
- Implemented caching strategies, reducing page load times by 50% and improving user experience.
- Applied SEO optimizations that resulted in a top-3 search ranking, increasing visibility and discoverability.
- Engineered a content update mechanism, ensuring AWS S3 uploads and site content stayed in sync.

Junior Software Developer | Rudolf Exploration | Mississauga, ON | Jul 2023 – May 2024

- Engineered Aruba Smart Map, an offline navigation system for [Android](#) and [iOS](#), reaching 3,000+ users.
- Implemented offline sync with Realm and AsyncStorage, reducing app load time by 33%.
- Conducted 3+ database migrations to normalize data, improving system performance by 10%.
- Integrated AWS SES and SNS to implement email verification with bounce handling.

Rust Projects and Professional Growth

Authentication Service with 2FA | [Repo](#)

- Architected a Rust 2FA and JWT authentication service with clear boundaries and error handling.
- Automated testing and deployment using GitHub Actions and Docker for consistent production builds.
- Separated persistent and ephemeral auth data using PostgreSQL for storage and Redis for 2FA tokens.

Multitree CLI | [Repo](#)

- Engineered a production-ready Git worktree management CLI in Rust with type-safe configuration.
- Implemented command orchestration, branch resolution strategies, and automated cleanup logic.

Skills

- **Programming Languages:** Rust, JavaScript, TypeScript, HTML, CSS, and Solidity
- **Frameworks and Libraries:** Axum, Tokio, ThisError, Request, Serde, Clap, React, and React Native
- **Databases and Cloud Platforms:** MongoDB, SQL, Postgres, Redis, AWS, and DigitalOcean

Education & Certifications

Let's Get Rusty LLC – [Rust Live Accelerator Certificate](#), Jun 2026

Completed a 3-month Rust Live Accelerator (100+ hours) focused on building safe, high-performance Rust applications. Built a production-grade Rust authentication service with JWT, 2FA, Postgres, Redis, and CI/CD. Strengthened expertise in async Rust, concurrency, and performance-focused system design.

Conestoga College – [Web Development Certificate](#), Aug 2022