

## PROFESSIONAL PROFILE

Rust backend-oriented engineer with experience developing stateful systems and command-line applications emphasizing safety, correctness, and maintainability. Strong understanding of Rust's ownership and error-handling models, with practical experience implementing validation logic, authorization rules, and time-based workflows applicable to backend and systems programming.

## TECHNICAL COMPETENCIES

### Programming Languages

- Rust (primary)
- SQL (basic)

### Rust & Systems Development

- Ownership and borrowing
- Error handling (Result, Option)
- Iterators and collection processing
- File I/O and streaming large datasets
- Asynchronous programming fundamentals

### Backend Engineering Concepts

- State management
- Data validation and authorization
- Business rule enforcement
- Structured data processing (JSON)

### Development Tools

- Git

- Linux command-line environment

## SELECTED PROJECTS

### Log Analysis Command-Line Tool — Rust

- Developed a command-line application in Rust for parsing and analyzing application log files.
- Implemented filtering by log level, date range, and keyword.
- Generated aggregated summaries using efficient data structures.
- Designed the tool to process large files incrementally to minimize memory usage.
- Emphasized robust error handling and predictable program behavior.

### Stateful Rust Application (Solana / Anchor)

- Designed and implemented a stateful Rust application enforcing strict validation and authorization rules.
- Developed time-based business logic controlling access to resources.
- Modeled persistent state using strongly typed Rust structures.
- Ensured correctness through compile-time guarantees and explicit runtime checks.

*(Underlying platform: Solana; architectural concepts transferable to backend systems.)*

## PROFESSIONAL EXPERIENCE

### Independent Rust Developer

- Built and maintained multiple Rust-based projects focused on correctness, safety, and clear state modeling.
- Worked with non-trivial Rust codebases requiring disciplined error handling and validation logic.

## CERTIFICATION

Cyfrin Updraft – Rust Fundamentals