

Oyatillo Akhadjonov

Software Engineer

[LinkedIn](#) | [GitHub](#) | [Email](#)

Learning core computer science, with focus on databases and distributed systems.

EDUCATION

New Uzbekistan University

Aug 2024 – Aug 2028

BSc in Computer Science

- GPA 3.48 / 4.0, Awardee of government scholarship (covers undergraduate)
- Relevant Coursework: Computer Architecture, Database Systems, Operating Systems, Data Structures & Algorithms

PROJECTS

Rust CLI – Employee/Department Management, [Github](#)

Jun 2026

Built a Rust CLI for employee/department management by hand-writing a tokenizer and command dispatcher without a parser library.

- Made new commands addable as plain data instead of new code, by turning the token-type sequence into a string key and looking it up in a hash map of function pointers – the argument count for each command matches its handler correctly, but by hand-kept consistency rather than enforced by compiler.
- Kept free-text arguments intact for handlers to use, by collapsing runs of unclassified tokens into a single chain slot while separately preserving their string values.

notAWS, [Github](#)

Apr-May 2026

Django-based AWS clone. Includes Docker-based VM provisioning with live in-browser terminals, per-service subscriptions, and cascading resource cleanup.

- Designed and architected system-wide structure with a “subapp” pattern (internal packages under one registered Django app, avoiding cross-app migration coupling for tightly-related models) and distributed work across a 5-person team.
- Designed conditional image-replication algorithm for image builds/updates, with correctness invariants preventing invalidation of VM instances running on a base image while it’s being replaced.
- Owned part of the Docker orchestration layer (`docker_ops`) and image/image-build subapps; rewrote AI-generated code in these modules for correctness and consistency before merge.

simulOS, [Github](#), [Demo](#)

Apr 2025

Operating system simulator mimicking some features of UNIX with no GUI.

- Built in-memory virtual filesystem simulating tree-hierarchy semantics, with on-the-fly path resolution handling relative paths and edge cases.
- Implemented Command-Registration pattern to modularly add new programs; Composite pattern to handle file/directory objects uniformly.
- Shipped as a 4-person team lead under a 2–3 day build constraint.

EXPERIENCE

ProximaOps.io

Aug – Oct 2024

DevOps Intern

Worked on DevOps tasks involving infrastructure automation and container optimization in GitLab CI/CD workflows.

- Automated GCP server provisioning with Terraform, Ansible, and GitLab CI/CD, cutting manual deployment steps to a single pipeline trigger.
- Reduced Docker image size by 10x+ using multi-stage builds.

OPEN SOURCE

- Migrated [TincHost](#) from raw SQLite to SQLAlchemy ORM.

LANGUAGES AND TECHNOLOGIES

Languages: Python, Rust, C++ (*familiar: C*)

Frameworks: FastAPI, SQLAlchemy, Django

Tools: Docker, Terraform, GitLab CI/CD