

Yusuf Bera Ertan

- My e-mail is 90008@gaze.systems
- I'm currently residing in Turkiye (Turkey) (looking for / available to relocate with sponsorship, will do remote)
- My GitHub is at <https://github.com/90-008>
- My LinkedIn is at <https://www.linkedin.com/in/yusuf-bera-ertan/>

Work Experience

Platonic.Systems (May 2022 - Jun 2023)

- Platonic.Systems is a software consultancy that specializes in providing machine learning, frontend development, etc. solutions using functional programming languages and paradigms.
- Worked on building and packaging for various projects; did provisioning of systems; helped open-source Nix ecosystem.

Ardana (Jun 2022 - Sep 2022)

- Ardana was a company developing a stablecoin on Cardano.
- Improved developer and user tooling; maintained servers and CI/CD pipeline; provided developer assistance; all using Nix.

Projects I worked on

Harmony, a federated chat protocol

- Participated in designing the protocol and writing the Rust ecosystem around it: a [library](#) for our own protobuf-based RPC system ([because we weren't happy with gRPC](#)), [the SDK](#) for interacting with servers. Also wrote integration tests and benchmarking code.
- Wrote a [server](#) for it in Rust. It was mainly inspired by conduit (a Matrix server written in Rust also) because I felt the need to write one that is lightweight for smaller instances (resource constrained devices).
- Wrote a GUI [client](#), also in Rust (the first iteration of this was written in iced, but I swapped to egui because I wanted to run it on web).

dream2nix

- [dream2nix](#) provides simplified Nix packaging for various programming language ecosystems.

- I implemented the Rust ecosystem; did large refactoring work; a ton of various other bug fixing (Rust, NodeJS, common logic), writing other related code (eg. autogenerated package sets for various package registries like crates.io, npm).
- Other than open-source unpaid work, I worked on it as Project Lead for Summer of Nix 2022 (July 2022 - Sep 2022), packaging various Rust software and improving dream2nix for Rust. And also as part of an [NLNet grant](#).

nix-cargo-integration

- [A Nix library / flake-parts module](#) based on dream2nix that makes packaging / developing Rust projects using Cargo a breeze using Nix.
- I wrote this because I wasn't happy with how Cargo projects were handled in Nix usually, and overtime it evolved a lot and it's being used somewhat often.

Others

- Rewrote [PluralKit's](#) command parser in Rust [here](#).
- Wrote an [ATProto lexicon tracker](#) using Rust and SvelteKit that tracks lexicon usages seen on the ATProto Jetstream. It implements timeseries data storage on top of a KV database called fjall.
- [My personal website](#) written using SvelteKit + TypeScript, which I'm quite proud of!
- A multithreaded [boids](#) (flocking) extension for the Godot Engine, written in Rust (and targetting all platforms).
- Wrote a small [BlueSky Jetstream consuming server](#) in Go that lets a user listen to if any of their reposts got liked.
- Wrote [musikquadrupled](#) which is a proxy server for [musikcube](#) because I wanted to make a [web client](#) for it and their server implementation did not support the necessary features for web.
- [A GUI application for organizing / tagging media](#) like how boorus do it, written in Zig.

Technologies

- Languages: Rust, Go, TypeScript, Svelte, Nix, Zig, GDScript
- Software: Linux; NixOS, Nix; Docker; GitHub, GitLab CI/CD; OpenTelemetry, Jaeger, Prometheus, VictoriaMetrics & VictoriaLogs, Perses

Interests

- Making (mainly using Godot Engine) and playing video games
- 3D art - mostly characters (Blender)
- Analyzing and thinking about fiction