

Lucas Desgouilles

📍 Based in France

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Senior software developer specializing in build engineering looking for a full time position starting from now.

Experience

Software Developer II at Kraken Futures

Fully remote

2020 Q2 → 2024 Q4

Software development of distributed systems in Financial Technology, using Rust, Kotlin and Java, deployed on Kubernetes.

My keen interest in DevOps and Security led me to adopt a flexible role, providing support to my colleagues, as well as spearheading improvements in development and deployment workflows.

- Implemented features on services to **improve our compliance standing**.
- Helped maintain various services to stay on top of **security updates**.
- Overhauled GitLab settings and CI pipelines with a documented and extensible system, streamlining the team's projects without disruption. **Tightened security** by revamping access to secrets and improved performance by **up to 30 minutes** per pipeline on active projects.
- Introduced Nix in CI and development services to streamline external dependencies. Deployed a Nix binary cache with proactive build pipelines and cross-compilation to **eliminate cold-cache issues** on all environments, including developer Macbooks.
- Wrote and implemented an RFC to adopt a GitOps deployment model in Kubernetes, **improving the resiliency** of operations on our dozen projects and **empowering developers** without cluster permissions.
- Wrote and implemented an RFC to port all our Kubernetes manifests to a bespoke solution using Nickel, **greatly improving the legibility and development experience** compared to status quo.
- Implemented a development environment to locally run a cluster with our software stack, often with **no manual intervention required**. "Live update" mode allowed running debug builds without rescheduling containers, **shortening development loop by over a minute**. Used this to **streamline** various end-to-end testing setups in CI.

Freelance Software Developer

2016 → 2020

- Developed for the Web using Python, Javascript, Elm, Haskell.
- Deployed on Linux (Debian, NixOS) and cloud infrastructure (AWS, GCP).

Skills

Development

- **Rust** (6 years)
- **Python** (6 years)
- **Shell scripting** (9+ years)
- **PostgreSQL** (6 years)
- HTML + CSS (9+ years)
- Javascript (3 years)
- Haskell (2 years)
- Elm (1 year)
- C / C++ (2 years)
- Java / Kotlin (1 year)
- **Git** (9+ years)
- RFC Process

DevOps

- **Nix / NixOS** (9+ years)
- Build systems
- **CI/CD Pipelines**
- **GitOps** (3 years)
- **Kubernetes** (4 years)
- **Docker** (9+ years)
- **Linux Administration**
- Cloud (AWS, GCE)
- Prometheus / Grafana

Security

- Supply chain analysis
- Kubernetes Hardening
- Reverse engineering
- Live binary hooking

Languages

- French (Native)
- English (Fluent)

Legend: **Proficient** | *Versed* | Competent

Education

École 42

Paris, France

2013 → 2016

- Relevant coursework: Algorithms and Data Structures, UNIX Development, Computer Graphics, Web Development, Object-Oriented Programming, Functional Programming

Side projects

Contributor to Free Software

2015 → Now

- Offered contributions to various projects, such as `nixpkgs`, `postgrest`, `specs`, `dodrio`.
- Authored Rust library `discord_game_sdk`, providing a safe and idiomatic interface to an external library with no first-party support.

Contributor to Grassroots Esports Scene

2016 → Now

Team Fortress 2 is a goofy multiplayer game developed by VALVE Software. It has been played in a serious competitive 6v6 setting since its release.

- Developed a widely used server-side plugin that implements fixes and gameplay balances catered towards competitive play.
- Deployed gameservers at multiple on-site (LAN) events, most notably at Insomnia Gaming Festival.
- Developed a “fantasy manager” game website that runs in parallel with tournaments.

Self-hosting, Homelab

- Run small scale infrastructure for myself: Authoritative DNS, Email, Websites, Password manager.
- Run some services for my friends: Voice chat server, Media server, Twitch/Discord bots.
- Deploy on recycled machines in a 19” rack at home.

Hobbies

- I enjoy casual gravel and road cycling, but I enjoy tinkering and assembling bicycles even more.
- I’m discovering electronics engineering by building ergonomic keyboards.