

# ANAS ELGARHY

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## SUMMARY

Software engineer with 7+ years of experience, specializing in C, C++, Zig, Rust, Python, Java, and Jakarta EE. Proficient in Actix, FastAPI, Spring Boot, Git, Docker, and Nix. Deep expertise in Linux (Arch, NixOS, Gentoo) with a strong focus on low-level system details and assembly-level optimization. Passionate open-source contributor with a strong commitment to the Linux and tech communities. Skilled in building innovative solutions and adapting to new technologies.

## EDUCATION

### Egyptian E-Learning University

Bachelor of Information Technology

Dokki, Egypt

Jul. 2020 – Aug. 2024

### Beni-Suef University

Bachelor of Computer Science

Beni-Suef, Egypt

Oct. 2020 – Aug. 2024

## EXPERIENCE

### Software Developer

Raya Information Technology

Nov 2024 – Present

6th of October City, Egypt

- Developing and maintaining the Transaction Middleware for our banking clients using Jakarta EE
- Collaborated directly with banking clients to deliver prompt support, critical bug fixes, and feature enhancements.

### Software Engineer

Dragons Bootcamp LLC

Apr 2024 – Nov 2024

Wyoming, United States (Remote)

- Developed a REST APIs using Rust with Actix framework and PostgreSQL to store data from learning management systems
- Explored ways to improve our learning platform by using state-of-the-art artificial intelligence

### Software Engineer (Intern)

LevelUp ESG™

Apr 2024 – Jun 2024

City Of London, England, United Kingdom (Remote)

- Designed the architecture for the PDF generation subsystem, improving document processing efficiency
- Laid the foundation for performance optimization, resulting in improved system responsiveness

### Software Engineer (Intern)

Dragons Bootcamp LLC

May 2023 – Dec 2023

Wyoming, United States (Remote)

- Assisted in developing the roadmap for Java-based backend programs, aligning with project goals and timelines
- Developed a full-stack web application using Spring Boot, PostgreSQL, and Docker

## PROJECTS

**aarty** — Mini framework to render images in the terminals/ttys | *Image-rs, Rust, Just*

October 2022 – Present

**lqth** — Simple but blazingly fast screenshot utility | *Rust, Just, X11*

December 2023 – Present

**todo2** — More advanced version of Rust's todo! macro | *Rust, Just*

September 2023 – Present

**Ayah** — plugin that displays verses from the Qur'an to Muslim developers | *Java, Gradle*

Augusts 2022 – Present

**jqca** — Simple java wrapper library for alquran-cloud API | *Java, Maven, Junit, Jackson*

July 2022 – Present

**jls** — Modern alternative to GNU/lis utility | *Java, Maven*

June 2022 – January 2023

**jpwd** — Modern alternative to GNU/pwd utility | *Java, Maven*

June 2022 – July 2023

**JColorfulConsole** — Write a colorful text to the console | *Java, Maven*

March 2022 – September 2023

**pinterest-login** — Login to Pinterest from rust | *Rust, Just*

September 2022 – Present

<b>Open Source Developer</b> <i>github.com/0x61nas</i>	Jan 2017 – Present <i>Hybrid</i>
<ul style="list-style-type: none"><li>• <b>image-rs</b>: use the built-in methods to convert the bytes between different representations <a href="#">#2071</a></li><li>• <b>cargo-bundle</b>: create a Linux module to improve the code structure <a href="#">#130</a></li><li>• <b>ockam</b>: show interactive menu to select one or more TCP intent when user doesn't specify <a href="#">#6544</a></li><li>• <b>ockam</b>: before sending the req to delete the TCP (outlet, inlet, listener) check that the target exists <a href="#">#6553</a></li><li>• <b>ockam</b>: support JSON output in the show subcommand <a href="#">#6325</a></li><li>• <b>halp</b>: add the support for custom URLs <a href="#">#58</a></li><li>• <b>halp</b>: refactor the config system <a href="#">#62</a></li><li>• <b>gpg-tui</b>: upgrade clap from v3 to v4 <a href="#">#56</a></li><li>• And <a href="#">more...</a></li></ul>	
<b>Nixpkgs maintainer</b> <i>github.com/NixOS</i>	Jun 2024 – Present <i>Remote</i>
<ul style="list-style-type: none"><li>• The main maintainer for <i>flawz</i> package <a href="#">#312751</a></li><li>• The main maintainer for <i>tabiew</i> package <a href="#">#315711</a></li><li>• The main maintainer for <i>rustmission</i> package <a href="#">#322474</a></li><li>• And more <a href="#">PRs</a>, and <a href="#">reviews</a>.</li></ul>	

TECHNICAL SKILLS

<b>Languages:</b> Zig, Rust, C, C++, Java, Python, SQL (Postgres), Bash, Lua, X86Assembly-Intel syntax, Java Script
<b>Frameworks:</b> Actix, Rocket, PyO3, JUnit, FastAPI, Spring Boot, Lombok, Yew, JPA, HTMX, Jackson, Image-rs, Serde, Clap, OpenGL, raylib, SOAP, Jakarta EE
<b>Tools:</b> Git, Cargo, Nix, Maven, Postgres, Just, GDB, <del>TeX</del> , Make, QEMU, Docker, GitHub, GitHub Actions, GitLab, Vim, Helix, Z-Shell, Neovim, Tmux, Arch Linux, NixOS, PyCharm, IntelliJ, Cachix, HTML, CSS, GCP, Ubuntu, Debian, SSH, Sqlite, Clang, GCC, NASM, FASM, GnuPG, FFMPEG, farbfeld, Wireshark, Recaf, JBoss, PlantUML, LLDB, Minikube, Kubernetes, Jenkins, ArgoCD, Prometheus, Grafana, Nexus

INTERESTS

<b>Embedded Systems:</b> Passionate about working as close to the hardware as possible. I dislike black-box systems.
<b>Performance Optimization:</b> Dedicated to building high-performance, lightweight software and constantly learning new techniques to maximize efficiency.
<b>Linux Systems:</b> Advanced user of Arch Linux, Gentoo, and NixOS. I enjoy exploring and customizing Linux systems in my free time.
<b>Programming Languages:</b> Fascinated by exploring innovative ways to communicate with computers. I'm continuously refining my vision of the perfect programming language, waiting for the right moment to bring it to life.
<b>PCB Design:</b> Enjoy designing custom PCBs for embedded and experimental hardware projects.
<b>Reverse Engineering:</b> Well... nothing is closed-source if you can read assembly ;)

LANGUAGES

<b>English:</b> Professional
<b>Arabic:</b> Native