Anas Elgarhy

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SUMMARY

Passionate about computers and technology with expertise in Rust, Python, Java, and Jakarta EE. Proficient in frameworks like Actix, FastAPI, and Spring Boot, and skilled in tools such as Git, Docker, and Nix. Extensive experience with Linux distributions, including Arch Linux, NixOS, and Gentoo, with a strong focus on low-level system details and assembly-level optimization. Committed to the Linux and open-source communities, with a proven ability to develop innovative solutions and adapt quickly 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

Nov 2024 – Present

Raya Information Technology

6th of October City, Egypt

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

Software Engineer

Apr 2024 - Nov 2024

Dragons Bootcamp LLC

Wyoming, United States (Remote)

- · Developed a REST API using FastAPI 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)

Apr 2024 - Jun 2024

LevelUp ESG™

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)

May 2023 - Dec 2023

Dragons Bootcamp LLC

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, React, 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, Grad	dle Augusts 2022 – Present
jqca — Simple java wrapper library for alquran-cloud API Java, Maven, Junit, Jackso	n July 2022 – Present
jls — Modern alternative to GNU/ls 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

Open Source Developer

Jan 2017 – Present *Hybrid*

github.com/0x61nas

- image-rs: use the built-in methods to convert the bytes between different representations #2071
- cargo-bundle: create a Linux module to improve the code structure #130
- ockam: show interactive menu to select one or more TCP inlent when user doesn't specify #6544
- ockam: before sending the req to delete the TCP (outlet, inlet, listener) check that the target exists #6553
- ockam: support JSON output in the show subcommand #6325
- halp: add the support for custom URLs #58
- halp: refactor the config system #62
- gpg-tui: upgrade clap from v3 to v4 #56
- · And more...

Nixpkgs maintainer

Jun 2024 – Present

Remote

- github.com/NixOS
 - The main maintainer for flawz package $\underline{\#312751}$
 - The main maintainer for tabiew package #315711
 - The main maintainer for rustmission package #322474
 - And more PRs, and reviews.

TECHNICAL SKILLS

Languages: Rust, C, C++, Java, Python, SQL (Postgres), Bash, Lua, X86Assembly-Intel syntax, Java Script **Frameworks**: Actix, Rocket, PyO3, JUnit, FastAPI, Spring Boot, Lombok, Yew, JPA, HTMX, Jackson, Image-rs, Serde, Clap, OpenGL, raylib, SOAP, Jakarta EE

Tools: Git, Cargo, Nix, Maven, Postgres, Just, GDB, 上上X, 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, JBoss, PlantUML

INTERESTS

Low-Level Programming: Passionate about working as close to the hardware as possible. Even with high-level abstractions, I always dive into the smallest details to understand how things work. I dislike black-box systems. **Performance Optimization**: Dedicated to building high-performance, lightweight software and constantly learning new techniques to maximize efficiency.

Linux Systems: Advanced user of Arch Linux, Gentoo, and NixOS. I enjoy exploring and customizing Linux systems in my free time.

Programming Languages: 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.

Reverse Engineering: Well... nothing is closed-source if you can read assembly;)

LANGUAGES

English: Professional **Arabic**: Native