Anas Elgarhy | Software Engineer

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SUMMARY

I have been passionate about computers and technology since a young age. With proficiency in various programming languages and technologies, I have demonstrated the ability to learn and adapt to new languages and techniques quickly.

My professional experience spans both software engineering and IT industries, where I have successfully applied my skills to develop and implement innovative solutions. I am particularly interested in leveraging my programming expertise to create a positive, real-world impact. I firmly believe that one line of code has the potential to drive significant change.

Additionally, I am deeply committed to the Linux and open-source communities, consistently contributing to and supporting various projects within these ecosystems. My technical expertise includes proficiency in Rust, Python, and Java and experience with frameworks such as Actix, FastAPI, and Spring Boot. I am also adept at using tools like Git, Docker, and Nix, and I have extensive experience with Linux distributions, including Arch Linux and NixOS.

"I just love computers"

EDUCATION

Egyptian E-Learning University   Dokki, Egypt
Bachelor of Information Technology   *Jul. 2020 – Aug. 2024*

Beni-Suef University   Beni-Suef, Egypt
Bachelor of Computer Science   *Oct. 2020 – Aug. 2024*

EXPERIENCE

Software Developer   Nov 2024 – Present
Raya Information Technology   *6th of October City, Egypt*
- Developed and integrated VP services with DN's Vynamic Platform, enhancing system performance and reliability.
- Collaborated directly with banking clients to deliver prompt support, critical bug fixes, and feature enhancements.
- Integrated the ATM middleware management system with LDAP for streamlined authentication and user management.

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, 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/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

VOLUNTEERING

Open Source Developer
github.com/0x61nas

Jan 2017 – Present

Hybrid

- **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
github.com/NixOS

Jun 2024 – Present

Remote

- The main maintainer for *flawz* package #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
Tools: Git, Cargo, Nix, Maven, Postgres, Just, GDB, LaTeX, 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,

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.
Open-Source Contribution: Active contributor to Linux and Rust ecosystems, driven by the belief in collaborative and transparent software development.
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.

LANGUAGES

English: Professional
Arabic: Native