Mina Albert Saeed Hermina

mina.albert.saeed@gmail.com
linkedin.com/in/minaalbert
github.com/in/minahermina
+201272937424
Egypt

SUMMARY

I am a senior Computer Science student specializing in IT, with a strong passion for GNU/Linux, Unix systems, and Systems Programming, and a deep interest in their evolution from inception to the present. I am seeking an internship in **Linux/Unix Systems Engineering or Programming** to contribute my skills while gaining hands-on experience in read-world projects.

EXTRACURRICULARS

IEEE Cairo University Student Branch **March 2024 - June 2024**
Networks Instructor

- Contributing to the development of technical content for the committee sessions and instructing real sessions for network committee members

SKILLS & LANGUAGES

Technical skills & Tools:

- C, C++, Python, Java, OOP, and Data structures
- GNU/Linux, Bash, and docker
- Basic understanding of TCP/IP Protocols Suite
- Git, GitHub, vim, and tmux

Languages:

- Arabic: Native proficiency
- English: Intermediate proficiency (B1)

PROJECTS

BigNum **April 2025 - June 2025**

- Developed a C99 arbitrary-precision arithmetic library for cryptographic applications, with architecture-dependent 32/64-bit word representation using arena allocation for memory management.
- Designed a robust API interface by studying **OpenSSL** and **libtommath** libraries, and implemented core big number algorithms such as Euclidean division and modular inverse.

Arena Allocator **February 2025 - March 2025**

- Implemented a custom single-header **thread safe** region-based memory allocator in C using **mmap**, following the **stb-style headers**.
- Designed an efficient memory management system with features including **page-aligned** allocations, and memory usage tracking.

imglib **November 2024 - January 2025**

- Developed a lightweight, portable C library for image manipulation on Unix-like systems.
- Followed the Suckless C coding style and wrote a portable Makefile, avoiding GNU-specific extensions.
- Implemented robust error handling system inspired by **ffmpeg** and stride-based indexing for efficient pixel access.

Linux Kernel With lockdep **April 2024**

- Configured and built the Linux kernel to enable lockdep module which helps in debugging deadlocks in kernel space, replacing the new custom kernel into my system and using it.

EDUCATION

Faculty of Computers and Artificial Intelligence at Cairo university. **October 2021 - Present**

- Bachelor's Degree in Information Technology

CERTIFICATES

- CCNA: Introduction to Networks **July 2024 – August 2024**
- CCNA: Switching, Routing, and Wireless Essentials **July 2024 – August 2024**