# JOSEPH NORKPLIM ATTAH

+233(050) 476-1981 ⬦ Kumasi, Ghana

[josephattah005@gmail.com](mailto:josephattah005@gmail.com) ⬦ [linkedin.com/in/joseph](https://linkedin.com/in/joseph) ⬦ [github.com/Joe-Degs](https://github.com/Joe-Degs)

## EDUCATION

BSc in Human Settlement Planning, Kwame Nkrumah University of Science and Technology October 2022
CWA: 63.90

## SKILLS

| | |
|---|---|
| Languages | Python, Go, Javascript, Bash, C, SQL |
| Tools | Git, Docker, Kubernetes, GCP, Qemu, VirtualBox, Terraform, Vagrant, Linux, Postg QGIS |
| Technical Skills | Systems and Network Programming, IP Networking, Virtualization, Automation, Do |
| Soft Skills | Time Management, Teamwork, Communication, Problem Solving, Leadership, Accou |

## PROJECTS

net — Python, Bash, Socket Programming, Network Programming                    [GitHub](#)

- Created a Python module that abstracts away the socket layer making tcp, udp and unix socket programming easier.
- Wrote a detailed technical documentation in Markdown and Bash automation scripts for testing on linux.
- Utilized Go net package's implementation as a guide increasing my understanding of Go's networking package, socket programming and IP networking significantly.

emulator — Go, C, RISC-V, GCC, VirtualBox, Linux Kernel, Qemu                    [GitHub](#)

- Created a RISC-V emulator capable of interpreting and executing the "rv64i" subset of the ISA.
- Implemented the complete "rv64i" subset of RISC-V specification with a functional virtual memory model and memory mapping unit capable of mapping elf binaries into virtual memory and executing them.
- Utilized opensource technical documents from riscv.org as guide increasing my understanding of CPU's and their instruction set architectures.
- Learned a great deal about compilers, cross compiling and how to build cross compilers, compiling for the first time a 2.5mb linux kernel and running it in Qemu.

autogis — Python, osmnx, networkx, OSM, QGIS, Urban Informatics                    [GitHub](#)

- Created a tool for visualizing and analysing street networks.
- Implemented functionality to (reverse) geocode addresses, geographic coordinates and place names, plot street networks and compute and visualize shortest path between two places.
- Utilized opensource tools, data and documentation which improved my understanding of urban informatics and opensource mapping significantly.

## EXTRA-CURRICULAR ACTIVITIES

- Volunteer IT Support Personnel - Prempeh II Library ICT Center, KNUST.

## EXPERIENCE

**Software Developer Intern**                                                    **December 2021 - February 2022**
KoldChain                                                                    *Remote*

- Wrote tests for Django models improving test coverage in the service by **70%**.
- Worked in a team environment improving planning, time management and communication skills significantly.