

CHRIS LIOURTAS

SOFTWARE DEVELOPER
IT ENGINEER

CONTACT

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- [andrn \(Github\)](#)
- kracked.tech (in-progress)

PROFILE SUMMARY

Recreational programmer and computer science enthusiast. Aspiring researcher with a focus and passion for programming languages and compilers. Loves Open Source Software, Linux and self-hosting a plethora of modern technologies in a custom home lab. Avid reader, loves to write clean documentation, designs and blogs for good software.

EDUCATION

2022 - 2025

UNIVERSITY OF EAST LONDON

- BSc (Hons) Cyber Security and Networks

2020

UNIVERSITY OF AEGEAN

- BSc Information and Communication Systems Engineering

PROJECTS - RESEARCH

[Project Repository](#)

KAISA

Programming Language - Compiler

A very ambitious compiler project born out of a passion for reading on Depended Types and Multi-Stage programming. It aims to compile to native code via LLVM while retaining as much of the features and benefits depended types offer. Very much in its early stages, hopefully with more research a solution can be created for the problems this kind of language creates, that is the distinction between runtime and compile-time in the inner representations of a program.

Data Communications on Automated Systems, A Comparative Approach.

[Thesis Repository](#)

Thesis Research Project

Research oriented thesis in which a rigorous comparison is made on two distinct ecosystems on the embedded development space. Comparing the programming language Rust and the Embassy framework to the C language with FreeRTOS it was concluded that while the CPU execution speed was practically the same the memory usage in Rust is significantly smaller. This is a very interesting result showing that more modern languages are beginning to become more capable in resource limited scenarios such as programming in microcontrollers. The comparison was made by implementing the same application using the two different ecosystems. The application then send device data via MQTT on an external broker that then wrote the data that was used to generate the graphs shown in the thesis on InfluxDB. All of the infrastructure for this project was created manually using Docker on an external VPS. Grafana was also used for visualizing the data given by the device for debugging purposes.

SEMINARS & CERTIFICATES

- University of Patras, Analysis and Programming of Automated Systems (APAS)
- DevelopingU, Introduction and Usage of Docker Containers

LANGUAGES

- English: Bilingual
- Greek: Native

SKILLS

- Rust, C, Java, C++
- Linux
- Kubernetes
- Docker
- Git

Homelab

Virtualization, Linux, Nix, Ansible, Proxmox

[Homelab Repository](#)

Using a raspberry pi, an old laptop and a used desktop machine I am able to host both Proxmox and Kubernetes nodes for self-learning and experimenting with new tech. The repository contains my most recent endeavors in converting all of my set-up in the declarative nix programming language, it also contains the dotfiles of all my favourite FOSS programs. The "critical" systems are just containers that are updated through ansible via Github Actions and my self hosted VPN.