

Kael Soares Augusto

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Computer Science | Software Engineering | Belo Horizonte, Minas Gerais, Brazil

EDUCATION

UFMG UNIVERSITY

BS IN COMPUTER SCIENCE

Jan 2020 - Expected Dec 2024

Belo Horizonte, Brazil

Avg. GPA: 3.8/ 4.0 (95%)

COLEGIO SANTA MARIA - CE

HIGHSCHOOL GRADUATE

Jan 2017 - Dec 2019

Belo Horizonte, Brazil

LINKS

Github:// [Dwctor](#)

YouTube:// [Dwctor](#)

LinkedIn:// [Kael-Soares-Augusto](#)

Personal site:// kaelsa.dwctor.com

COURSEWORK

GRADUATE

Compilers and Languages

Static Program Analysis

Agile Methodologies

Data Structures

Algorithms 1 & 2

Cloud Computing

Computer Networks

Operating Systems

Parallel and Distributed Systems

Machine Learning

Formal Methods

Fundamentals of CS Theory

PERSONAL STUDY

Self-Hosting Cloud Services

(*NextCloud Docker (Portainer) on Debian*)

Keyboard Circuit Design

(*Kaly42 Split Ergonomic Keyboard*)

LinuxOS Install, Maintenance and Usage

(*Ubuntu, Mint, Zorin-OS, Endeavour, Arch, Debian,*

Pop-OS, Manjaro, Nobara, Puppy Linux, ...)

Unix Tools and Scripting

(*ssh, Bash, Terminal editors vim/nano, Cronjob, ...*)

SKILLS

PROGRAMMING

Experienced:

C • C++ • Python • Elixir

Bash • Git/Github • Makefile

Intermediate:

eBPF • SML • Assembly • SQL

Familiar:

VHDL • Verilog • MySQL

WORK EXPERIENCE

COMPILERS LABORATORY | SOFTWARE ENGINEER | HONEY-POTION

Sep 2022 - Present | Belo Horizonte, MG

Scholarship Oriented by Prof. Fernando.

Part of the team that develops Honey-Potion for LAC. An open source project that translates Elixir to eBPF.

- Refactored Codebase with Good OO Practices.
- Organized clear and achievable tasks and goals which accelerated it's development in more than 2x.
- Implementation of an automatic compilation pipeline from the eBPF backend code to binary.
- Implementation of Liveness and Dead variable analyses for linear programs.
- Filmed clear and concise videos for the project ([\[LAC-DCC\] - Honey Potion Guides and Showcases - English](#)) in YouTube (Over a thousand cumulative views).

LANGUAGES

ENGLISH - FLUENT | NATIVE SPEAKER SINCE BIRTH

PORTUGUESE - FLUENT | NATIVE SPEAKER SINCE BIRTH

SPANISH - BEGINNER | LEARNT FROM HIGH-SCHOOL

PROJECTS

KALY42 | OPEN SOURCE KEYBOARD

May 2023 - Jul 2023 | Belo Horizonte, MG

Planned, Designed and Built a Split Ergonomic Columnar keyboard with 42 keys.

Available in [GitHub \(Photos and Project\)](#) and [YouTube \(Introduction and Story\)](#).

I learnt about Circuit Design, Firmware and using Open Source Software (QMK).

PERSONAL CLOUD SERVER | USING LINUX & OLD HARDWARE

Jan 2023 | Belo Horizonte, MG

Set up Open Media Vault (Open Source NAS) with Portainer (Docker), Nextcloud (Cloud Service) and DuckDNS (Free Dynamic DNS), which taught me more about servers, Linux, managing firewalls, opening network ports, ssh and much more.

AWARDS

2019 Gold Medalist Brazilian Olympiad of Science

2019 Gold Medalist Brazilian Olympiad of Astronomy and Astronautics

AREAS OF INTEREST

I am interested in any new opportunity in the Computer Science Field! These are the ones I have explored and enjoyed so far!:

SOFTWARE ENGINEER | LOW-LEVEL PROGRAMMING AND SCRIPTING

CLOUD COMPUTING | SYSADMIN, SERVERS AND SOFTWARE

OPERATING SYSTEMS | CLI TOOLS, COMPATIBILITY AND TESTING

COMPILERS | CODE OPTIMIZATION AND TRANSLATION

REFERENCES

PROF. FERNANDO MAGNO QUINTÃO PEREIRA |

PRONESTO@GMAIL.COM

Ph. D, Professor, at Universidade Federal de Minas Gerais (UFMG), Belo Horizonte, Brazil