

# Caio Fernandes

📍 Brazil

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🔗 [c410-f3r.github.io](https://c410-f3r.github.io)

🐙 [github.com/c410-f3r](https://github.com/c410-f3r)

📖 [stackoverflow.com/u/210304](https://stackoverflow.com/u/210304)

in [www.linkedin.com/in/caio-fer](https://www.linkedin.com/in/caio-fer)

## About

### Summary

Software engineer with a Bachelor's degree in Computer Science and over ten years of experience in several technologies and programming languages.

### Profile

Particularly interested in security, NP-problems, network, embedded systems, high-performance, web development, artificial intelligence and cryptography.

### Objective

Work in areas related to software engineering, whether on the web, desktop, blockchain, embedded, mobile or DevOps. IT (Information Technology) is always changing and that is why I'm also always looking forward for a new challenge to increase my knowledge.

## Languages

### Portuguese

Native

### English

Fluent

### French

Intermediary

### Korean

Basic

## Education

### Bachelor of Computer Science - FEI (Fundação Educacional Inaciana)

2012/01 -> 2018/06

Broad view of many old and new concepts. Most notably, I focused myself in programming, algorithms and meta-heuristics.

ai, algorithms, c, c++, calculus, compilers, computer graphics, databases, html, java, network, operational systems, physics

### Bachelor of Technology in Internet Systems – FIAP (Faculdade de Informática e Administração Paulista)

2008/01 -> 2009/12

Course focused on core web technologies and its foundations.

css, databases, html, java, javascript, network, php

## Technical Skills

### Databases

MongoDB, MySQL, PostgreSQL, SQL Server

### Frameworks

AngularJS, Ember.js, ReactJS, Spring, Substrate, Symphony, Vue.js

### Languages (Familiar)

Assembly (x84\_64), C, C++, C#, F#, Golang, Kotlin, Lua, Python, Ruby, Scala, Swift

### Languages (Proficient)

Java, JavaScript, NodeJS, PHP, Rust, TypeScript

## Tools

Ansible, Apache HTTP, Apache Kafka, BIND, Docker, Docker Compose, Eclipse, GNU/Linux, gcloud, iptables, Kubernetes, LVM, LXC, Nginx, Rsyslog, SSH, Squid, TensorFlow, systemd, VSCode, Vim

## Work Experience

### **Blockchain Developer (Remote), Zeitgeist**

03/2021 -> 10/2021

- Substrate pallet development along side unit and integration tests.
- Deployment of parachain nodes for different relay chains.
- Research and implementation of liquidity provider incentives

### **Blockchain Developer (Remote), Valiu**

10/2020 -> 01/2021

- Substrate blockchain development attending custom demands.
- Building libraries to interact with external nodes.
- Fundamental structures and services using the Rust programming language.

### **Independent Developer (Remote), Zondax**

03/2020 -> 06/2020

- Design and construction of FFI endpoints to interact with several languages.
- Embedded system development using the Rust programming language.
- Maintenance of different projects related to Blockchain.

### **Senior Blockchain Architect (Remote), LNX Protocol**

09/2019 -> 01/2020

- Creation of JSON-RPC endpoints and JS library to sign transactions.
- Fixing overall bugs and refactoring infrastructure into idiomatic Rust.
- Upstreaming and producing improvements to Substrate and Polkadot.

### **Java Developer (Intern), Neolog Consultoria e Sistemas, Brazil**

02/2015 -> 05/2016

- Maintenance and development of Supply Chain applications.
- Spring Framework, Hibernate, Jackson, Jasper and Jersey.
- Java Swing and AngularJS.
- Build systems (Ant, Gradle and Maven).

## Professional Certifications

### **Kubernetes and Cloud Native Associate (KCNA)**

2022/10 -> 2025/10

Foundational knowledge and skills in Kubernetes and the wider cloud native ecosystem.

### **Linux Foundation Certified IT Associate (LFCA)**

2022/10 -> 2025/10

Expertise and skills in fundamental Linux information technology functions, especially in cloud computing.

### **Linux Foundation Certified System Administrator (LFCS), Linux Foundation**

2021/02 -> 2024/02

Hands-on management and administration of many applications that compose a "real life" Linux system.

### **Confluent Certified Developer for Apache Kafka (CCDAK), Confluent**

2020/07 -> 2022/07

Kafka features, designing, monitoring and troubleshooting of custom applications.

### **Google Cloud Certified Associate Cloud Engineer, Google Cloud**

2020/07 -> 2023/07

Deploy applications, monitor operations and manage enterprise cloud solutions.

### **Certified Blockchain Solution Architect (CBSA), Blockchain Training Alliance**

2020/05 -> 2022/05

Different audiences needs and the pros and cons regarding the chosen technologies.

**Professional Scrum Master I (PSM I), Scrum.org**

2019/11 -> Current

Fundamental level of Scrum terminology and strategies to apply Scrum in Scrum teams.

**Certified Blockchain Developer - Ethereum (CBDE), Blockchain Training Alliance**

2019/07 -> 2021/07

Ethereum concepts alongside testing and deploying of smart contracts using Solidity.

**Certified Kubernetes Administrator (CKA), Linux Foundation**

2019/02 -> 2022/02

Knowledge and hands-on competency to create and administrate Kubernetes' clusters.

**Java SE 6 Programmer Certified Professional (1Z0-851), Oracle**

2015/06 -> Current

Solid knowledge of Java and its standard library.

## Courses

The full list with more than 50 completed certified courses is available at <https://c410-f3r.github.io/courses>.

**A Cloud Guru:** 31 finished courses

**Coursera:** 6 finished courses

**The Linux Foundation:** 5 finished courses

**Udemy:** 9 finished courses

## Open Source

**mop**

Flexible and modular single or multi-objective solver for contiguous and discrete problems. It is possible to define custom NP-Problems and choose any supported solver combination. An online version compiled to WASM is available at [c410-f3r.gitlab.io/mop-wasm-playground](https://c410-f3r.gitlab.io/mop-wasm-playground).

**oapth**

Version control tool for databases through SQL migrations. Supports embedded and CLI workflows for MS-SQL, MariaDB, MySQL, PostgreSQL and SQLite.

**Miscellaneous**

I did many open-source contributions to several projects and the whole portfolio is available on GitHub. Personally, my proudest contributions were made to the Rust compiler (Rustc) specified in detail at [github.com/rust-lang/rust/pulls?q=is%3Apr+author%3Ac410-f3r+is%3Aclosed](https://github.com/rust-lang/rust/pulls?q=is%3Apr+author%3Ac410-f3r+is%3Aclosed)