

# Jean-Baptiste Le Corre

## Junior Software Developer

Paris, France

github.com/Jibus22

linkedin.com/in/jle-corr/

jibus22.github.io

## Projects

### BOOTCAMP EMBEDDED DEVELOPMENT

MARCH 2023

C, atmega328p, library-free, interrupts, timers, adc, uart, i2c, spi

Development of a **firmware** with 10 modes - displaying values from adc potentiometers, sensors, clock (...) on a led screen, clock setting thru uart bus (...).

### BOOTCAMP DATA SCIENCE

FEBRUARY 2023

Python, numpy, panda, matplotlib

Matrix manipulations, image filters, implementation of **k-mean clustering algorithm**, feature engineering and plotting data with panda.

### TASKMASTER (2 VERSIONS)

JANUARY 2023

C, system, multi-threading, pthread

Implemented a job supervisor (supervisord-like) and my own **line editor** with history and **auto-completion**. Integration of a **yaml parsing library** for the configuration file. Implemented a minimalist logging library working with a **singleton**.

- Asynchronous version: Jobs and timers are managed with **signal handlers**. Timers are scheduled through a queue.
- Multi-threaded version: Study case I did for myself to dig multi-threading. Designed with a **producer-consumer** model to handle user input the safest way. Usage of mutex, semaphores, barriers, conditional locks and read/write locks.

### WOODY\_WOODPACKER

SEPTEMBER 2022

C, security, packer, ELF

Shellcode **injection**, encrypt and inject self-decryption code into executable ELF binary target. I implemented **segment padding** injection technique (taking advantage of code cave after an executable load segment) as well as **elf shifting** if no codecave had been found.

### FT\_LINUX

AUGUST 2022

System, cross-compilation, kernel compilation, linux from scratch

Built my own **linux distribution** following the **LFS** book. Started from a lightweight virtual Alpine release as a host, then built compilation toolchain, filesystem and finally compiled linux kernel.

### FT\_TRANSCENDANCE

MARCH 2022

reactjs, nestjs, websocket, postgresql, SQL, OAuth 2.0, docker-compose, APIs

Web application of an online pong game with leaderboard, profile dashboard, chat interface. I implemented part of back-end, all **websocket** system and front-end in the end.

### WEBSERV

SEPTEMBER 2021

C++98, HTTP, sockets

Implemented a HTTP/1.1 web server, nginx-like. Using `epoll()` for linux & `kqueue()` for macosx to poll socket I/O. CGI handling. Profiling with `siege`.

### FT\_CONTAINERS

JUNE 2021

C++98, STL, template, SFINAE, data structures, iterators, constness

Implemented some **STL containers**: map, list, vector, stack, queue with **time complexity** of algorithms equivalent to the STL. Implementation of **BST**, circular linked list.

## Professional experience

### FULLSTACK DEVELOPER

JAN - JULY 2024

Qeeps, Paris

Development of a notifications micro-service. Integration and writing of Cypress components tests. Improved CI/CD pipeline - updated images and dependencies. Proposals accepted and applied for optimizations and best practices: lazy loading, improving cache usage and rtkquery api.

### AUDIO TECHNICIAN

2015 - 2019

AmpVisualTv, Paris

Salaried in this french leader company in tv filming. I worked on notable events like UCI Road World Championships, Africa Cup of Nations, FIFA World Cup, African Games.

Junior software engineer passionate and curious about tech. Former audio technician. Exploring and digging several fields of computer science (system, cybersecurity, devops, AI, web). I am now looking for a position. Please checkout my portfolio for more informations & details.

## Education

### DIGITAL TECHNOLOGIES

#### ARCHITECT

42 Paris school

2020 - TODAY

### BTEC IN AUDIOVISUAL - AUDIO SPE

Lycée Léonard de Vinci, Montaigu

2012 - 2014

## Skills

- C • C++ • python3 • asm • javascript • typescript • reactjs • nodejs • SQL • sass • bash
- git • github • docker • cypress • RTK Query • GCP • postgresql • mongodb • chakraUI • kubernetes • linux • gdb • make
- problem-solving • autonomy • attention to detail

## Languages

### FRENCH

native

### ENGLISH

intermediate

## Interests

### ASSOCIATIONS

Videobus (teach filmmaking to children).  
Le Fieald (humor open scene).

### SPORT

Basketball, bmx, climbing, sailing, judo  
developed team spirit and rigor.

### MUSIC

Played guitar many years, developed