CLEMENT BALEA
SENIOR SOFTWARE ENGINEER

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Infrastructure:

AWS	★★★★★
Docker	★★★★★
Linux	★★★★★
Terraform	★★★★★
Ansible	★★★★★

Development:

JavaScript	★★★★★
◦ Vue.Js	★★★★★
◦ Node.js	★★★★★
◦ Electron	★★★★★
◦ jQuery	★★★★★
TypeScript	★★★★★
Python3	★★★★★
◦ Flask	★★★★★
◦ FastAPI	★★★★★
◦ Django	★★★★★
PHP	★★★★★
◦ Symfony	★★★★★
Bash	★★★★★
PowerShell	★★★★★
C++	★★★★★

CI/CD:

Jenkins	★★★★★
Sonarqube	★★★★★
GitHub	★★★★★

Database:

MySQL	★★★★★
PostgreSQL	★★★★★
MSSQL	★★★★★

Tools and methodology:

Jira	★★★★★
Confluence	★★★★★
Airtable	★★★★★
Salesforce	★★★★★
AI Integration	★★★★★
TDD	★★★★★

Languages:

French	★★★★★
English	★★★★★
Romanian	★★★★★
German	★★★★★

Studies and Certification:

2020 - AWS Cloud Practitioner
2008 - Bachelor's degree MIAGE
2006 - DEUG MIAS

EXPERIENCE

Software Engineer with 15 years of experience, working with both large corporations and start-ups. I love taking on new challenges and exploring different topics. My personal and open-source projects are my secret laboratory, allowing me to hone my craft and experiment the latest technologies.

SENIOR SOFTWARE ENGINEER (04/2024 - NOW)   IRIS (FREELANCE)

IRIS is a venture capital firm aiming to invest in high-potential European startups. To better target these hidden gems, they have developed an application that allows them to collect and receive alerts about the developments of these startups.
My role:

- Optimization, cleaning, and improvement of constraints on the existing database (reduced from 8 GB to 55 MB).
- Migration, optimization, and rewriting of the existing solution from Ruby to Python.
- Deployment of servers on AWS using IaC with Terraform.
- Implementation of CI/CD with GitHub Actions.
- Analysis of developments and writing of tickets.
- Continuous synchronization between Airtable and the database.
- Creation of an API to perform maintenance tasks and calls from various fronts.
- Alerting via Slack on the growth of startups in the database.
- Creation of a Slack bot to interpret user requests and convert them into SQL queries using AI.
- Integration of AI to automatically complete data using ToT / CoT methodologies.
- Creation of a Chrome extension in Vue 3 to retrieve information in the database from the website being visited.
- Creation of a new API (FastAPI / Vue 3 / TS / PostgreSQL) for communication with investors.

`Python3` `FasAPI` `Terraform` `Vue.Js` `TDD` `CI/CD` `AI Integration` `Data Engineering` `PostgreSQL` `GitHub` `Linux` `Bash` `Airtable` `Salesforce` `Slack`

SENIOR SOFTWARE ENGINEER (08/2023 - 10/2023)   RGOODS (FREELANCE)

Rgoods is a startup that works, among other things, on facilitating donations to NGOs. As part of the development of their SaaS platform for NGOs, they called on my services to integrate the PSP (Payment Service Provider) aggregator NORBr.

`Python3` `PostgreSQL` `Django` `Vue.Js` `TypeScript` `NORBr`

TECH LEAD (09/2021 - 04/2023)   ALMA (FREELANCE)

Alma is a BNPL (buy now pay later) fintech that allows customers to pay by instalments or deferred payment and pay the merchant immediately.
My role:

- Develop new features with tests and pair programming. Code review of my teammates.
- Manage high-risk production run tasks with complex SQL queries to identify critical issues and financial consequences (> €100,000).
- Participate in the design of new products and ensure their technical consistency.
- Integrate new teammates and help them acquire new skills. Evaluate the performance of my colleagues.
- Write technical and functional documentation. Initiate knowledge-sharing sessions.
- Participate in the establishment of the foundations of a new project on FastAPI, ensuring the compatibility and reusability of the authentication system on Flask.

`Python3` `Flask` `FastAPI` `Vue.Js` `TDD` `PostgreSQL` `Metabase` `GitHub` `Docker` `GCP` `Postman` `Team management`

SENIOR SOFTWARE ENGINEER (09/2018 - 09/2021)   AIRBUS (ESIDE)

The goal of the Airbus IoT project was to reduce material losses and optimise the production chain. To achieve this, we needed to capture, decode and interpret the messages sent by the sensors, and generate alerts if necessary.
My role:

- Developing new features: front-end, back-end and UI/UX. One of my most interesting features was a codec editor to decode and normalise messages sent by IoT sensors.
- Writing IaC templates using AWS CloudFormation and Terraform to automate the deployment of new services.
- Writing Ansible playbooks to automate server configuration and monitoring.
- Write documentation for every new feature. Enabling the integration of new team members by documenting the configuration of our working environment.
- Create an interface to receive MQTT messages instantly by hierarchical level.
- Migrated from Flask to Flask RestPlus, and then to Flask-RESTX.

Python3 Flask Vue.Js TDD DynamoDB AWS Terraform Ansible MQTT
GitHub Linux

SITE RELIABILITY ENGINEER (05/2018 - 09/2018)   AIRBUS (DEVOTEAM)

The goal of Airbus's public cloud project is the automation of the creation of AWS accounts on demand, as well as ensuring the security perimeter of these accounts. The SRE team, of which I was a part, aimed to ensure the rapid creation of accounts with associated security rules. Updating existing accounts according to new rules was also within our scope.

Python3 AWS Sonarqube

TECH LEAD (01/2014 - 05/2018)   AIRBUS (FREELANCE)

INSIDE is the Airbus Infrastructure self-service portal which includes services such as: technical and service account creation, server and storage creation, alerting and deactivation of non-compliant accounts, destruction of temporarily created servers.
My role:

- Set up the CI/CD pipeline and improve the development process.
- Writing architecture decision records (ADRs) for infrastructure design and new feature development.
- Support project managers in the design of new product architectures and their technical coherence.
- Help my colleagues approach complex features.
- Reviewing my team's code and helping my colleagues learn new skills through pair programming and holding knowledge sharing sessions.
- Migrating our product from a custom framework to Symfony. Improve security and simplicity of existing services.
- Creation of MySQL to MSSQL mass import script for daily data updates.
- Writing complex SQL queries and stored procedures to handle complex behavior.
- Participate in the recruitment process of new engineers and check their technical skills.

PHP Symfony2 jQuery PowerShell ASP.NET Jenkins Sonarqube MSSQL
MySQL Mercurial Windows IIS Team management

FULLSTACK DEVELOPER (10/2012 - 12/2013)   FREELANCE

Varied missions, for different clients: web agency, banking sector, training platform.
My role:

- Design and development of a mapping application to provide a detailed view of the Airbus site.
- Creation of a security best practices document for PHP-Symfony development for Caisse d'Epargne (Bank)

PHP Symfony2 jQuery OpenLayers MySQL

FULLSTACK DEVELOPER (09/2010 - 11/2011)   LA BONNE AGENCE

"La bonne agence" is a web agency that creates websites and web applications.
My role:

- Create new Drupal modules/themes to meet client needs.
- Optimise database performance to improve user experience.
- Analyse and implement new features.

`PHP` `Drupal7` `jQuery` `MySQL`

FULLSTACK DEVELOPER (10/2008 - 06/2010)   EXTELLIENT

Extellient is a company that provides digital solutions to support their customers. The quality and maintainability of their product was one of their main objectives.
My role:

- New feature interfaces development (frontend, backend).
- Ovidentia module development.
- R&D regarding PHP compilation.

`PHP` `Symfony1` `jQuery` `MySQL`

PROJECTS

GAME SERVER   MURLOC VILLAGE

Developed a World of Warcraft game server with automated integration and deployment process, as well as data backup. Implemented a voting points system for players, exchangeable for services on the site. Created a forum and developed a heavy application for game download and repair while checking file signature for integrity.

`Node.js` `Vue.js` `Express.js` `Electron.js` `Bash` `C++` `MySQL` `GitHub Actions CI/CD` `Docker`

WOW-MODEL-VIEWER   GITHUB PAGE

A library for displaying interactive 3D models of characters, objects, and NPCs from World of Warcraft.

`JavaScript` `TypeScript` `GitHub Actions CI/CD` `npm`

TRINITYCORE-SRP6   GITHUB PAGE

Development of a JS library for calculating the verification value in the SRP-6a protocol used by World of Warcraft TrinityCore and AzerothCore server emulators.

`JavaScript` `GitHub Actions CI/CD` `npm`