Rubén Calvo Villazán

rubencalvovillazan@gmail.com

+34 - Madrid (Spain) - 09/08/1997

github.com/rubcv rubencv.es

linkedin.com/in/ruben-calvo-villazan/

EDUCATION

2015 - 2019
(Granada, Spain)

UNIVERSIDAD DE GRANADA

Bachelor's degree in Computer Science and Engineering.

Specialization in IT (**Information Technology**) and graduating **with honors** in the subjects related to programming. Some of the knowledge I acquired includes algorithms and data structures, Linux operating systems, open source, object oriented programming in different languages, artificial intelligence, server and client side programming, networking and cybersecurity.

Degree Final Project using **Blockchain** technology.

LICENSES & CERTIFICATIONS

Certified Kubernetes Administrator (CKA) – The Linux Foundation
Issued: Mar 2022
Credential ID LF-jauh05f8bl

Certified Kubernetes Application Developer (CKAD) – The Linux Foundation
Issued: Mar 2022
Credential ID LF-gxxw905q4b

Hyperledger Fabric Administration – The Linux Foundation
Issued: Jun 2022

Hyperledger Fabric for Developers – The Linux Foundation
Issued: Jun 2022

Certified Kubernetes Administrator (CKA) with Practice Tests - Udemy
Issued: Feb 2022
Credential ID UC-41c5ded9-8ab9-418d-a83b-b019140199cf

Certified Kubernetes Application Developer (CKAD) with Practice Tests - Udemy
Issued: Feb 2022
Credential ID UC-e7adc9e7-bec5-4ef5-a5d6-7c3c44678be7

Certificate in Advanced English (C1) – Cambridge University Press & Assessment
Issued: Jun 2022

EXPERIENCE

Nov 2020 - Present
(Essen, Germany)

Blockchain Developer.

As a Blockchain developer at NEXPLORE (HOCHTIEF entity) I develop a Blockchain platform to unify construction processes, allow the traceability of materials and ensure the immutability of construction contracts. My role in this company is the design, configuration and development of a **Hyperledger Fabric** Blockchain network, development of REST APIs to communicate with the Blockchain and perform network operations, maintenance and platform features development.

- Configuration of the **Hyperledger Fabric** core.
- Multi-organizations and multi-peers Blockchain configuration.
- Dynamic membership management, identities, policies definition and Certificate Authority integration.
- Attribute-based access control (ABAC) to the Blockchain.
- Governance chaincode that performs administrative operations.
- REST API in **Go** that performs Blockchain operations.
- REST API in **TypeScript** that communicates with the Blockchain.
- **Keycloak** authentication, **TLS** communication security.
- **Kubernetes** configuration for the orchestration (**Docker**), management and deployment strategy of the Blockchain.
- **Helm Charts** and **Helm File** configuration for multiple-charts deployment.
- Smart Contracts / Chaincode development in **TypeScript** and **Go**.
- Production-ready distributed Blockchain hosted on **Microsoft Azure**.
- **PostgreSQL** persistent storage (off-chain data).
- **Block Explorer, Prometheus** and **DataDog** to audit the Blockchain and monitor the cluster.

CI/CD

GitHub actions/pipelines.

Integration Tests (Blockchain operations).

Unit Tests.

Performance Tests (Gatling).

Workflow

GitHub collaborative code.

Agile - SCRUM workflow using **Jira** and **Confluence**.

Oct 2019 – Nov 2020
(Madrid, Spain)

Full-Stack Blockchain Developer.

As a Full-Stack Blockchain developer at Cibernos, I worked both on the end user's view of the product and all the Blockchain logic behind it. My role in this company was the design, configuration, development and maintenance of a **Hyperledger Fabric** Blockchain network. The development of various REST APIs in NodeJS to communicate with the Blockchain and the integration of a web application in Angular for the end-user to interact with the product.

- Blockchain network design.
- **Hyperledger Fabric** configuration and development.
- Blockchain scalability and network maintenance.
- Hyperledger Fabric upgrade from version 1.4 to 2.0.
- **Smart Contract** development in **NodeJS** and **Go**.
- REST API design and development in **NodeJS**.
- **Asynchronous** interactions API-Blockchain.
- REST APIs hosted on **Amazon Web Services**.
- Distributed network scalability.
- Blockchain integration with **Amazon Web Services Simple Storage Service (S3)** to store the off-chain data**.**
- Blockchain integration with a decentralized storage system (**IPFS**) to store off-chain data and confidential files.

  (https://ipfs.io/)
- Modularization of the product in **Docker** containers.
- Dependencies and multi-container definitions using **YAML** files and **Docker-Compose**.
- Securization of the API with **JSON Web Tokens**.

Workflow

Version control and collaborative code with **GitHub.**

Agile workflow with **Trello**.

PERSONAL PROJECTS

Forensic Evidence Manager with **Ethereum** Blockchain. (2019)

System that allows verifying the integrity of forensic evidences through the use of the **Ethereum** Blockchain. It consists of a web interface (connected to the Blockchain with the **Metamask Wallet**) through which a user enters the URL of the web page that he wishes to evidence. The backend performs a **Hash** of the page, which is stored in the Blockchain in order to be able to contrast possible changes on the page. In this way, the immutability of the existing content on said website can be guaranteed.

- **Ethereum Framework.**
- Smart Contract development in **Solidity**.
- Network management with **Truffle**.
- REST API development in **NodeJS**.
- **Ethereum Oracle**, trusted entity connected to the Blockchain.
- Environment integration with the **Truffle-suite** tools.
- Application testing with **Ganache** and **TestRPC** test-networks.
- Integration with the web wallet **Metamask**.
- Documented design and development.

(https://github.com/rubcv/Ethereum-evidence-manager)

Decentralized File System (**IPFS**) API in TypeScript. (2020)
(https://github.com/rubcv/IPFS-API)

Creation of a web service in the decentralized **TOR Network**. (2018)
(https://github.com/rubcv/Hidden-Service-Tor-Network)

Decentralized Voting System using **Hyperledger Fabric**. (2021)
(https://github.com/rubcv/Decentralized-Vote)

LANGUAGES

English – Advanced - CAE/C1 Cambridge Certificate.
Credential ID: B8224954

Spanish – Native.