

# Rubén Calvo Villazán

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

ngithub.com/rubcv rubencv.es

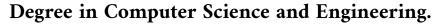
☐ linkedin.com/in/ruben-calvo-villazan/

### **EDUCATION**

2015 - 2019 (Granada, Spain)

UNIVERSIDAD

**DE GRANADA** 



Information Technology (IT) and Software Engineering.

Graduating with honors in the subjects related to programming.

Some of the knowledge I acquired includes Algorithms, Data Structures,

Linux Operating Systems, open source, object oriented programming (C++),

Artificial Intelligence, server and client side programming,

Networking and Cybersecurity.

Degree Final Project using Blockchain technology.

# **LICENSES & CERTIFICATIONS**



Certified Hyperledger Fabric Administrator (CHFA) – The Linux Foundation

Issued: Nov 2022

Credential ID: LF-ei1jmt3nm8

Hyperledger Fabric Administration – The Linux Foundation

Issued: Jun 2022

Credential ID: LF-ydgy6edzhd

Hyperledger Fabric for Developers – The Linux Foundation

Issued: Oct 2022

Credential ID: LF-sbokwnxie1

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

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 (CAE/C1) – Cambridge University Press & Assessment

Issued: Jun 2022

Credential ID: B8224954



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Certified Blockchain Solutions Architect (CBSA) – Blockchain Training Alliance

Issued: May 2024

Credential ID: 1a4155e7414320025fe5bfba9abcccac06687334db224e122d23975009a8c428

#### **EXPERIENCE**

Jul 2023 - Present (Madrid, Spain)



# **Blockchain Solutions Architect.**

As a Blockchain Solutions Architect at BBVA I am responsible for designing and implementing blockchain-based solutions to improve banking services.

# **Designing Blockchain Solutions:**

- Architect end-to-end solutions for customers using blockchain technology.
- Ensure that the blockchain solutions meet business requirements and align with industry best practices.

# **Strategic Planning:**

- Develop an overall blockchain ecosystem engagement strategy to integrate blockchain solutions within the bank's existing systems.
- Collaborate with cross-functional teams to identify and prioritize blockchain use cases.

# Performance and Risk Management:

- Create performance metrics to measure the effectiveness of blockchain implementations.
- Conduct risk/failure analysis and prepare risk mitigation strategies.

# **Best Practices and Training:**

- Establish best practices or guidelines for blockchain teams.
- Train and mentor technical staff concerning blockchain concepts, tools, and frameworks.

Nov 2020 – Jul 2023 (Essen, Germany)

# △ HOCHTIEF



# Blockchain Developer.

As a Blockchain Developer at NEXPLORE (HOCHTIEF) I created a **Blockchain as a Service** platform to unify construction processes, allow the traceability of materials and ensure the immutability of construction contracts. My role in this company was 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 connects to 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)



# Blockchain Developer.

As a Blockchain Developer at Cibernos, I worked on different layer applications that connect to the Blockchain and on all the Blockchain core configuration 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 with different microservices and distributed cloud solutions.

- 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.
- 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.

- 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**.

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

Decentralized File System (IPFS) API in TypeScript. (2020)



(https://github.com/rubcv/IPFS-API)

ERC-20 Token implementing methods for Hashed Time-Lock (2023) transactions on Hyperledger Fabric.

- Nest.js web application.
- **Hyperledger Firefly** fabconnect. \*\* HYPERLEDGER FIREFLY

(https://github.com/rubcv/ERC20-token-HLF)

# **LANGUAGES**

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



**Spanish** – Native.