

DIEGO VICUNA RODRIGUEZ

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Portfolio: <https://dvicuna98.github.io/portfolio/>

ABOUT ME

Passionate and self-driven software developer and team lead with a strong background in agile methodologies. Specialized in microservices and full-stack development, with expertise in domain-driven design (DDD) and event-driven architectures. Experienced in designing and deploying scalable solutions on Google Cloud. Always eager to learn, improve, and drive innovation within teams.

WORK EXPERIENCE

Solution Architect - Universidad Casa Grande

Ecuador - Guayaquil | Aug 2024 - Present

- Engineered an automatic locking and unlocking system using Java, containerized with Docker, and deployed on Google Cloud Platform (GCP). This solution significantly enhanced operational efficiency, reducing several days of manual work.
Skills: Java, Docker, Google Cloud Platform
- Developed a web-based vacation request management platform with Nuxt.js (frontend) and Google Apps Script for backend automation. Deployed on Google Cloud Run with Docker, replacing paper-based processes and streamlining approval workflows.
Skills: Nuxtjs, Vuejs, Docker, Apps Script, Google Cloud Platform
- Designed and implemented a data collection service for Zoom meetings using NestJS for the backend, Firestore for storage, and deployed on Google Cloud Run with Docker. Enabled automated instructor notifications for uploading recorded sessions to Moodle, improving compliance and accessibility.
Skills: Nestjs, Express, Firestore, Firebase, Docker, Google Cloud Platform, Zoom APIS, Typescript
- Built and optimized a validation service using FastAPI and Firestore, deployed on Google Cloud Run with Docker. This system ensured seamless account creation for partner companies, preventing duplicate or already-used email issues.
Skills: FastAPI, Open API, Python, Docker, Google Cloud Platform, Firestore, Firebase

Technical Co-Lead - Iberoamerican University Foundation (FUNIBER)

Ecuador - Guayaquil | mar. 2024 - Aug 2024

- Led and mentored a development team in designing and implementing scalable software applications following Domain-Driven Design (DDD) and Clean Code principles.
- Built microservices using NestJS, containerized with Docker, and deployed on Google Kubernetes Engine (GKE), ensuring high performance, scalability, and reliability.
Skills: NestJS, Microservices, Docker, Google Kubernetes Engine (GKE), Domain-Driven Design (DDD), Clean Code

- Architected and deployed a microservice leveraging NestJS, RabbitMQ, and MongoDB, containerized with Docker and deployed on GKE. This solution enabled seamless message exchange between a legacy system and a third-party service, preventing system overload while ensuring advisors retained critical information.
Skills: NestJS, RabbitMQ, MongoDB, Docker, Google Kubernetes Engine (GKE), Microservices Architecture

Senior Software Developer – Iberoamerican University Foundation (FUNIBER)

Guayaquil, Ecuador | Jan 2024 – Mar 2024

- Architected and deployed a microservice on Google Cloud Platform (GCP) using NestJS, RabbitMQ, and the Google Drive API for data retrieval. Containerized with Docker and deployed on Kubernetes (k8s) with MongoDB for storage, this solution optimized the generation of large information requests, improving user experience and workflow efficiency.
Skills: NestJS, RabbitMQ, Google Drive API, MongoDB, Docker, Kubernetes (k8s), Google Cloud Platform (GCP)
- Developed and integrated a web application frontend using Laravel with Inertia, and implemented backend methods with Lumen to generate statistical report files for the Spain Ministry of Education. Utilized RabbitMQ for message queuing, MongoDB for storage, and containerized with Docker on Kubernetes. This automated report generation, eliminating manual processes and significantly reducing annual workload.
Skills: Laravel, Inertia.js, Lumen, RabbitMQ, MongoDB, Docker, Kubernetes (k8s)
- Fostered team growth and engagement by initiating partnerships with external institutions for webinars, seminars, and lectures, enhancing team members' soft skills and confidence, and creating new professional development opportunities.
Skills: Leadership, Public Speaking, Team Development, Strategic Partnerships

Backend Chapter Lead – Iberoamerican University Foundation (FUNIBER)

Guayaquil, Ecuador | Apr 2023 – Aug 2024

- Architected and designed scalable backend solutions following Domain-Driven Design (DDD), Vertical Slice Architecture, and Hexagonal Architecture. Containerized applications with Docker, implemented RabbitMQ for message queuing, and deployed on Google Cloud Platform (GCP) using Kubernetes (k8s). This framework empowered team members to enforce domain business rules effectively and adopt modern architectural patterns.
Skills: Domain-Driven Design (DDD), Vertical Slice Architecture, Hexagonal Architecture, Docker, RabbitMQ, Kubernetes (k8s), Google Cloud Platform (GCP)
- Led and conducted internal webinars on Domain-Driven Design (DDD), providing a platform for team members to ask questions, address concerns, and enhance their understanding of architectural best practices. This initiative improved collaboration and knowledge sharing across development teams.
Skills: Technical Leadership, Public Speaking, Software Architecture, Mentorship

Semi Senior Software Developer – Iberoamerican University Foundation (FUNIBER)

Guayaquil, Ecuador | Oct 2021 – Jan 2024

- Designed, developed, and deployed a microservice using Laravel and RabbitMQ for message queuing, containerized with Docker, and deployed on Google Cloud

Platform (GCP) using Kubernetes (k8s). This solution enabled institution supervisors to check applicants' enrollment status via email, eliminating the need for direct system access and improving follow-up efficiency.

Skills: Laravel, RabbitMQ, Docker, Kubernetes (k8s), Google Cloud Platform (GCP)

- Led the UI/UX design and development of a scholarship application platform, prototyped in Figma with IBM Carbon Design and implemented using Vue.js. The platform streamlined the application process, eliminating manual data entry and enhancing daily workflow efficiency.

Skills: Vue.js, Figma, IBM Carbon Design, UI/UX

- Developed a dynamic frontend form using Figma, Google Material Design, and Vue.js, deployed on GCP with Docker and Nginx as a reverse proxy. The form self-generates based on a provided JSON file, accelerating development cycles and allowing the organization to rapidly adapt to new requirements.

Skills: Vue.js, Figma, Google Material Design, Docker, Nginx, Google Cloud Platform (GCP)

Freelance Software Developer – TBA Solutions

Guayaquil, Ecuador | Jan 2020 – Jun 2020, May 2021 – Jul 2021

- Designed the UI/UX and developed a mobile application for a medical care contract between TBA Solutions and Asisken. Built with Flutter using the Provider architecture, the app consumed REST APIs and provided an intuitive interface for managing medical care services. Led both frontend and backend development, ensuring seamless integration and optimal user experience. (Jan 2020 – Jun 2020)

Skills: Flutter, Provider, REST APIs, Mobile Development, Backend Development

- Developed and deployed a web platform using Django (backend) and PostgreSQL (database), hosted on Heroku. The system allowed users to manage raw materials for product production and automatically generate monthly reports, eliminating manual report creation and significantly improving operational efficiency. (May 2021 – Jul 2021)

Skills: Django, PostgreSQL, Heroku

- Provided support for a time control system used by Avícola Fernández, built with .NET and C#. Responsibilities included bug fixing, system maintenance, and performance optimizations, ensuring smooth operation and reliability. (May 2021 – Jul 2021)

Skills: .NET, C#

EDUCATION

Salesian Polytechnic University | Computer Science Engineer

Guayaquil, Ecuador | 2018 – 2023

- Led the development of a distributed system that enabled students to evaluate and grade professors' classes at the Salesian Polytechnic University (Guayaquil campus). Additionally, developed the mobile application using Flutter, which interacted with the backend microservice. The system also allowed students to request class inspections, fostering transparency and accountability in the university's teaching methods. The feedback and inspection requests were presented to the Computer Science Degree department, providing valuable insights for continuous improvement.

Skills: Distributed Systems, Team Leadership, Flutter, UI/UX

- Served as a webinar speaker on the development of a mobile application using Flutter and Firebase. This presentation played a key role in shifting the Mobile Applications curriculum, ensuring that students developed proficiency in creating diverse applications using Flutter. It also contributed to the creation of future mobile application development contests at the university.

Skills: Flutter, Firebase, Mobile Development, Public Speaking

- Developed an augmented reality application using Unity 3D, featuring real-time cooperative communication for a coding learning game. The game allowed two users, using different phones, to interact and learn coding concepts in an engaging and interactive way. This project demonstrated how augmented reality could be used to teach abstract concepts like data structures in a more tangible and intuitive manner.

Skills: Unity 3D, Augmented Reality, Game Development, Real-Time Communication

CERTIFICATIONS

Nestjs - Microservice course

Jul 2024

Nestjs - Authentication and Authorization

Jun 2024

Particular Software - Distributed Systems Design Fundamentals

Apr 2024

URL: <https://www.credential.net/80ad1fb1-f551-45c7-aff9-19f749377ac4#acc.OKhu3EGS>

Nestjs - Architecture & Advance Patterns

Jan 2024

Nestjs - Advanced Concepts

Nov 2023

Platzi - Docker course

Mar 2022

URL: <https://platzi.com/p/diegovicuna/curso/2066-docker/diploma/detalle/>

Platzi - PHP with laravel

Agu 2021

URL: <https://platzi.com/p/diegovicuna/curso/1467-curso-php-laravel/diploma/detalle/>

Platzi - Advance Flutter course

jul 2020

URL: <https://platzi.com/p/diegovicuna/curso/1603-flutter-avanzado/diploma/detalle/>

LANGUAGES

Spanish: Native

English: C1