Victor Cataño

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EDUCATION

- **Universidad Nacional de Colombia sede Medellín** — Medellin, Colombia
  Undergraduate in Systems and Informatics Engineering; GPA: 4.5/5 — Jan. 2015 – Dec. 2021

- **Pontificia Universidad Católica de Valparaíso** — Valparaíso, Chile
  Student exchange program, awarded by Alianza del Pacífico scholarship — Feb. 2019 – Jul. 2019

- **Coursera** — Online courses — Nov. 2019 – Ene. 2020
  - Specialization: Architecting with Google Compute Engine
  - Algorithms: Design and Analysis (Stanford University)

WORK EXPERIENCE

- **Globant** — Medellin, Colombia
  Flutter Developer — Mar. 2022 - present
  - Re-engineered a legacy **Ionic/TypeScript** app into **Flutter/Dart** for The Walt Disney Company.
  - Decreased delivery times considerably by designing a modular, easy-to-reason, and error-avoiding architecture that allows other developers in the team to contribute effectively.
  - Refactored many modules and mechanisms to make the code more stable, comprehensible, and concise by applying **SOLID principles, functional programming and design patterns**.
  - Leveraged **agile methodologies** to work effectively with a **remote team of 7** in different parts of the globe.
  - Increased the product reliability through the implementation of different **automated testing** strategies.
  - Contributed with disruptive ideas to make the project succeed.
  - Mentored the team on the state-of-the-art of the Flutter community, using popular packages like **riverpod**, **bloc** and **go_router**.

- **Gomac Research Group** — Medellin, Colombia
  Software Engineer — Sep. 2020 - Feb. 2022
  - Led the development of a multi-platform application (**Android, iOS, and Web**) using **Flutter**, that improves processes involving inspections and analysis of the obtained data.
  - Meticulously planned the low and high-level architecture, using design patterns of **Object-Oriented Programming, Functional Programming, SOLID Principles, and Test-Driven Development** for building a modular, maintainable and testable product.
  - Leveraged many state-of-the-art packages and techniques used by the Flutter community like: **riverpod, hooks, bloc, auto_route, go_router, freezed, reactive_forms, drift, and dartz**.
  - Implemented offline operation and synchronization among many clients.
  - Used relational databases (**PostgreSQL y SQLite**) to implement complex relationships among the data, both locally and on the server.
  - Wrote the backend in **Python** using **Django y Django Rest Framework** with high test coverage.
  - Mentored a group of developers who collaborated on the project using workflows with issues and pull requests reviewing on **GitHub**.
  - Implemented **Github Actions** for **CI/CD** on the frontend and backend repositories.

- **Bancolombia** — Medellin, Colombia
  Python developer — Jan. 2021 - Jul. 2021
  - Led a team of 3 developers in the design and implementation of a web scraper for the biggest bank in Colombia using **Python** and **Scrapy framework**, capable of obtaining information from more than 200 websites.
  - Used effectively different information extraction techniques for **HTML, PDF, JSON**, and other documents.
  - Greatly reduced the time and memory consumption by taking advantage of Scrapy's queuing, parallelism, connection management, cache building and asynchronous programming.
  - Designed a clean and organized error and data management using design patterns and Scrapy tools like spiders, middlewares and pipelines in order to obtain structured and important information.

- **Universidad Nacional de Colombia**   Medellín, Colombia
  Cloud Administrator - Part-time   *Nov. 2018 - Jul. 2021*
    - Maintained a **Moodle** system that served 3200 engineering students per year, with extra plugins which allowed teachers to create programming questions in many languages.
    - Provisioned resources and configured the architecture in **Google Cloud Platform** in order to support the load and reduce costs.
    - Managed many **Linux (Debian and Ubuntu)** servers, using the command line in order to improve performance, install the necessary software, increase security and automate tasks like backups and certificate renewals.
    - Modified the source code of some plugins written in **PHP, Javascript, HTML, BASH,** etc. Using **Git** for change management.
    - Developed a plugin that uses a fingerprint reader to reduce fraud on exams. Made it with **PHP, Javascript, C#, and Firestore**. Was installed in a computer lab where 500 students can take exams with fingerprint verification.

- **Institución Educativa Pbro. L.E.P.M**   Barbosa, Colombia
  Web Developer - Part-time   *Feb. 2014 - Aug. 2014*
    - Designed and implemented a e-voting platform for selecting a students representative in a high-school. The project was done before finalizing his high school studies and was written from scratch using plain **HTML5, Javascript, CSS, JQuery, PHP, and Mysql**.
    - Created a fast and user-friendly voting with live results for 2000 students which voted in three places concurrently.

PROJECTS

- **[Personal Project] Inventory Management App**   *Oct. 2022 - present*
  Writes a Flutter app for managing the inventory and accounting, using cutting-edge packages like **isar, riverpod, hooks, and material 3**.
- **[Group Project] Group building platform**   *Jul. 2018 - Nov. 2018*
  Planed and implemented a plataform that allows to build teams in any organization based on their abilities, in the project requirements and had the posibility of using AI. Used **Angular and Spring Boot with CI/CD in GitLab.**
- **[Group Project] Software Boulevard (Educational game)**   *Feb. 2018 - Jun. 2018*
  Developed a question-answer competitive game with an strict process of requirement eduction. Worked in cooperation with 15 distributed teams in Colombia, USA and China using distributed software development techniques. Used **Ionic, Angular, MongoDB** and an API in **NodeJS**, the project was deployed in Google Cloud Platform.
- **[Personal Project] Banknote recognition software**   *Jul. 2017 - Nov. 2017*
  Wrote a **Python** script using computer vision techniques and **OpenCV** that receives a photo and returns the amount of money present. Can be used to help people with visual disabilities.
- **[Personal Project] CPU Benchmark**   *Feb. 2017 - Jun. 2017*
  Wrote a benchmark using **C++ and assembly** in order to compare the performance of different CPUs in integer and floating point operations.
- **[Group Project] Real Estate management application**   *Jul. 2016 - Nov. 2016*
  Led a team developing a **Java** application with GUI using Object Oriented Programming in order to implement complex business rules that allowed managers, buyers and sellers to trade real estate.

Skills

Programming languages

Advanced: Dart, Java, Python, SQL
Medium: Javascript, PHP
Basic: Go, Rust, Matlab, C#, C++, Haskell, Prolog, SPARQL, PLSQL, Bash

Awards

- Awarded with Alianza del Pacífico scholarship (2019).
- Honor enrollment at his university for having one of the best grades (2016-2019).
- Selected by a local government scholarship for my university studies (2015).

Hobbies

Photography, Travel, Hiking, Mechanics, Electronics.

Technologies

Flutter, Django, Google Cloud Platform, Git, Unix/Bash, Docker, HTML, CSS, Ionic, Angular, Spring Boot, Laravel, Moodle, Wordpress, OWASP, Node.js.

Languages

Spanish: Native
English: Advanced