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 after being selected for Alianza del Pacífico scholarship — Feb. 2019 – Jul. 2019

Coursera — Online courses — Nov. 2019 – Ene. 2020
- Specialization: Architecting with Google Compute Engine
- Specialization: Deep Learning
- Algorithms: Design and Analysis, Part 1 (Stanford University)
- Machine Learning (Stanford University)

WORK EXPERIENCE

Globant — Medellin, Colombia
Flutter Developer SSr. — Mar. 2020 - present
- Integrates development teams in **Flutter** projects for different industries.
- Suggests and implements **design patterns**, **tests** and **architectures** in order to improve the maintainability of the codebase.

Gomac Research Group — Medellin, Colombia
Software Engineer — Sep. 2020 - Feb. 2021
- Led the development of a multi-platform application (**Android, iOS, and Web**) using **Flutter**, the goal was to boost the productivity in 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.
- Made the app work offline and capable of synchronizing with a central server for information sharing 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 which collaborated in the project using workflows with issues and pull requests reviewing in **GitHub**.
- Implemented **Github Actions** for **CI/CD** on the frontend and backend repositories.

Bancolombia — Medellin, Colombia
Python programmer — 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 different information extraction techniques for **HTML, PDF, JSON and Javascript** documents.
- Made performance improvements by taking advantage of Scrapy queuing, parallelism, connection management, cache building and asynchronous programming in order to get the best performance possible for the process restrictions.
- Made 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
- Managed a **Moodle** system which 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 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 changes 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*

  - ○ Developed 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**.
  - ○ Achieved a fast and user-friendly voting with live results for 2000 students which voted in three places concurrently.

PROJECTS

- **[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.

- **[Group Project] Real Estate management application**   *Jul. 2016 - Nov. 2016*
  Leaded 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.

- **[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.

SKILLS

PROGRAMMING LANGUAGES

Advanced:	Dart, Java, Python, SQL
Medium:	Javascript, PHP
Basic:	Go, Rust, Matlab, C#, C++, 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).

TECHNOLOGIES

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

LANGUAGES

Spanish: Native
English: Advanced