

EDUCATION

Bogotá, Col **Universidad Nacional de Colombia** **2016-2022**
Bachelor of Engineering - BE - Systems and Computer Engineering

TECHNICAL EXPERIENCE

Back-end Software Engineer at Instaleap **Oct 2022 - Present**

- I work at a high-growth startup with a small team but high impact.
- I handle high-scalability systems that support millions of users, using very agile workflows.

Software Engineer at IBM **Jan 2022 - Sep 2022**

- Contributed to the migration of multiple APIs and microservices from legacy technologies to Typescript.
- Executed DevOps activities to support the smooth transition and integration of these APIs.

Software Engineer Intern at IBM **Jul 2021 - Jan 2022**

- Optimized a large database replication process, reducing the time from 12 hours to 1 hour.
- Resolved foreign key conflicts during the replication of a large relational database by implementing a topological sorting algorithm.

Projects:

Quick Test CLI **Jun 2021 - Present**
Quick Test CLI: A Cross-Platform for Automated Testing in Competitive Programming

See Project: github.com/LuchoBazz/quicktest

- Quick Test CLI is a cross-platform command-line tool to automate testing in competitive programming. It supports comparative testing with a brute-force solution, stress testing, and custom checker testing, and it works with many languages (C/C++, Java, Python, Rust, Go, Kotlin). Experiments show large time savings and good detection of Wrong Answer, Runtime Error, Memory Limit Exceeded and Time Limit Exceeded cases.

C++ Algorithm Snippets **Jul 2020 - Present**
Collection of Algorithms and Data Structures for Competitive Programming

See Project: github.com/LuchoBazz/cpp-algorithm-snippets

- Implemented advanced algorithms and data structures in C++ using both object-oriented and functional programming paradigms.
- Developed a Python script to generate code snippets compatible with VSCode and Vim, enhancing usability and efficiency.

LANGUAGES AND TECHNOLOGIES

- **Programming Languages**
 - **Typescript - Node.js** (Advanced)
 - **Python** (Intermediate/Advanced)
 - **Rust** (Intermediate)
 - **Java** (Intermediate)
 - **C++** (Intermediate)
- **Languages**
 - **English** (B1+)
 - **Spanish** (Native)
- **Technologies**
 - **PostgreSQL** (Advanced)
 - **Git** (Advanced)
 - **LLM prompt engineering, LangGraph** (Intermediate)
 - **Unix** (Intermediate)
 - **Docker** (Intermediate)
 - **AWS / GCP** (Intermediate)
 - **Terraform** (Intermediate)

HONOR AND AWARD

Hackathons:

- **2nd Place Ironhacks Competition 2018 (RCODI Purdue University) May-Jul 2018**
Participated in a programming hackathon for UNAL students, organized by Purdue University. Developed a Node.js application leveraging the Google Maps API to visualize and analyze approximately 100,000 data points using statistical methods.