

# Miguel Ángel Ortiz Marín

Energized undergraduate student with great problem-solving, software engineering, systems building, and AI skills. Demonstrated experience in entrepreneurial and innovative projects with social impact. Looking for Machine Learning or Software Engineering internships or projects. Interested in Quantum Computing.

📍 Bogotá, Colombia

[miaortizma.github.io](https://miaortizma.github.io)

+57 321 664 3375



## Education

**The Coding School QxQ** • 06/2020 – 06/2021  
IBM Sponsored Quantum Computing Certificate

**Universidad Nacional de Colombia**  
**B.Sc. Computing and Systems Engineering**  
Expected graduation date: 10/2021  
Honors: Top 15 GPA (2016, Freshman Year)

GPA: 4.5/5.0

## Work Experience

**Freelance Machine Learning Engineer**  
**Trace.Coffee** • 03/2021 — Present.

- Attracted investors by pushing innovation using state-of-the-art torch framework D2Go and tracking algorithms.
- Doubled coffee warehouse tracking system performance by introducing parallel processing of video frames.

**Freelance React FrontEnd Developer**  
**Hospital Universitario Nacional** • 02/2021 — Present.

- Amplified doctors and team satisfaction by solving critical bugs and revamping UX and UI design within 2 weeks.
- Took over technical leadership of the project and improved maintainability with refactorization and rewriting of code.

**Research and Teaching Assistant** • **MindLab**  
**Universidad Nacional de Colombia** • 02/2019 – 10/2020

- Transformed infrastructure by building centralized dataset storage and authentication system used by 20+ ML researchers with LDAP, [Jupyterhub](#), Docker, and NFS.
- Navigated a remote environment with big interdisciplinary team for virtualization of [MLDS](#) program, which was completed by 100+ students.
- Simplified site maintenance with ground-up rewrite using modern tool GatsbyJS.

## Skills

### Programming Languages

Python • Go • C++ • Java • Javascript • Typescript • Cuda • Dart • Bash

### Frameworks and Technologies

AWS • GCE • Firebase • Unix • Docker • Rancher Kubernetes • React / Native • Flutter • PostgreSQL • MongoDB • Tensorflow • Pytorch • Agile (scrum) • Cryptocurrency.

### Languages

Native Spanish • Billigual English • B1 German • Beginner Japanese

### Graduate Level Courserwork

Quantum Computer Programming • Distributed Systems • Machine Learning

## School Projects

**Smart Garden** • **Wix** • **Pitch** • 2020-II

- Won third place from 70 teams by building a low-cost agriculture sensing and monitoring prototype within an interdisciplinary team.
- Orchestrated system architecture and software construction using MQTT, MongoDB, go and next.js

**WashUp** • **Github** • 2020-I

- Reached national news exposure by building handwash quality monitoring prototype using Flutter and Firebase.
- Achieved 97% accuracy on hand gesture recognition dataset with torch 3D CNN.

**trus** • **Github** • 2019-II

- Spearheaded the implementation of a maze solving game with cross-play in a 5-man team using microservices.
- Learned Go by writing main game logic in game server and game load balancer.
- Simplified FrontEnd tasks by writing an API gateway with Typescript and Apollo GraphQL.
- Reduced deployment times by using Terraform and Rancher Kubernetes.

**Deem-AI** • 11/2018 - 02/2019

- Raised \$5k AWS credits by completing Apps.co startup accelerator for AI-based market analysis initiative.
- Oversaw implementation of demo using Keras and landing page with React, AWS.

## Awards

**SIE: Smart Irrigation System** 06/2018 – 05/2019

- Recipient of Marconi Society International Fellowship Medal for building a low-cost, smart irrigation system with interdisciplinary team.
- Traveled to Menlo Park, California and participated in the Young Scholars symposium in Stanford.
- Trained high accuracy crop irrigation random forest models based on sensor data and farmers' knowledge.

## Competitive Programming

- Won first place from 111 teams at 2018 ACM-ICPC nation-wide competition.
- Represented Colombia in 2018 and 2019 South American regionals.