

# Miguel Ángel Ortiz Marín

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## PERSONAL STATEMENT

Happy, motivated and persistent student with great problem solving, software engineering, systems building and AI skills. Demonstrated experience in entrepreneurial and innovative projects with social impact. I enjoy calisthenics and running, learning from others' mistakes, meeting new people and traveling, electro and rock music and videogames.

## EDUCATION

### Universidad Nacional de Colombia

B.Sc. Computing and Systems Engineering

Expected graduation: June 2021

Cumulative GPA: 4.5 / 5.0

Honors: Top 15 GPA (2016, freshman year)

## HIGHLIGHTABLE WORK EXPERIENCE

### MindLab, Universidad Nacional de Colombia

Research and Teaching Assistant | Bogotá

03/2020 - 10/2020

- Supported the creation, review of materials and deployment of the first virtual iteration of Machine Learning and Data Science ([MLDS](#)) program which was successfully completed by around 100 students.

03/2019 - 10/2020

- Implemented a centralized authentication and dataset storage system for machine learning research with [Jupyterhub](#), Docker, LDAP and NFS that is used by around 15 researchers.
- Created materials and graded tasks for an intelligent systems undergraduate course with around 60 students.
- Graded tasks for machine learning graduate level courses with around 30 students.
- Wrote and managed a static and responsive [website](#) using GatsbyJS for the research group.

## SKILLS

### Programming Languages:

Java, C++, Python, Javascript, Go	Advanced
Cuda, Bash, Typescript, Dart	Intermediate

### Frameworks and Technologies:

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

### Soft Skills:

risk taking • active listener • creative • goal oriented • easy going • fast learner • tutoring • thinker

### Languages:

B2 English • B1 German • Beginner Japanese

## IMPORTANT SCHOOL PROJECTS

### Smart Garden | [Wix Site](#) | [Pitch](#)

06/2020 - 11/2020 | Undergrad Course

Urban agriculture sensing and monitoring prototype built by an interdisciplinary team.

- Lead system architecture and software prototype construction with MQTT, MongoDB, go and next.js
- Wrote an infographic with GatsbyJs.
- [Won](#) third place from 70 group projects in 8th version of TPI+Expoldeas

### WashUp | [Github](#)

04/2020 - 07/2020 | Bogotá | ML [Graduate](#) Course

- Built Flutter and Firebase prototype for hand-wash quality monitoring for COVID pandemic.
- Implemented hand gesture video classification models in Pytorch with 97% accuracy on Kaggle [dataset](#) using 3D and (2D+1) convolutional models.

### trus | [Github](#)

8/2019 - 12/2019 | Bogotá | Software Architecture

Online game of escaping procedural mazes.

- Lead Architect in a five-man group.**
- Built [PWA](#) in React/Redux and Typescript. Implemented [game server](#) and [load balancer](#) in Go. [API gateway](#) using Typescript and Apollo.
- Handled deployment to AWS using Terraform and Rancher Kubernetes which handled thousand users stress testing.

### SIE: Low cost intelligent irrigation system

06/2018 - 05/2019 | Bogotá and Menlo Park, CA

- Built ML models to predict the right moment to irrigate crops based on sensors and farmers knowledge with high accuracy.
- Marconi Society 2019 [Celestini Program Colombian representatives](#). Attended Young scholar symposium in Stanford and dinner and award gala.**

### Deem-AI | [Github](#)

11/2018 - 02/2019 | Bogotá | ML Undergraduate Course

- Startup focused on crowd counting for market analysis and segmentation.
- Wrote state of the art report and [demo](#) in Python and Keras. Built a static [landing page](#) in React and deployed to AWS.
- Completed [Apps.co](#) startup accelerator and learned various business techniques.

### Competitive Programming

- [Won](#) first place from 111 teams at 2018 ACM-ICPC nation-wide competition.
- Handle [mia\\_ortizma](#) in codeforces.

## OTHER SCHOOL PROJECTS

### **Javascript Autocomplete**

02/2019 - 05/2019 | Bogotá, Colombia

Used recurrent neural networks and abstract syntax trees in Tensorflow to predict the next token in a sequence using recurrent neural networks.