



# NIKOLAY PRIETO

Software Developer, ML Engineer

## HARD SKILLS

Python	8+ yrs
Linux	5+ yrs
Open Source Tools	5+ yrs
Git	4+ yrs
ROS	2+ yrs
AWS	2+ yrs
Docker	1+ yr
JavaScript	0.5+ yr

## CONTACT

- 📍 Calle 12 3 05, 251201  
La Calera, Colombia
- 📧 nikorose87
- 📞 +57 300 3501177
- 🐦 nikorose
- ✉️ enprietop@unaL.edu.co

## PROFILE

Machine Learning Engineer with a strong foundation in computer science, data science, and software development. Experienced in developing and deploying machine learning models for real-world applications. Skilled in data preprocessing, feature engineering, model selection, and evaluation. Proficient in various machine learning frameworks and libraries.

- Machine Learning Model Development
- Data Preprocessing and Feature Engineering
- Deep Learning and Neural Networks
- Natural Language Processing (NLP)
- Computer Vision
- Model Deployment and MLOps
- Python Programming
- Data Analysis and Visualization

Passionate about solving complex problems through data-driven solutions. Committed to staying up-to-date with the latest advancements in machine learning and AI. Looking for opportunities to apply my expertise in a dynamic and innovative environment.

## WORK EXPERIENCE

**Mvnifest**  
**Machine Learning Engineer**

Dec 2022 - Present

Mvnifest is a third-party logistics company reinventing the way logistics management. We are developing a mainframe to streamline the entire logistics process.

- As a ML engineer, I am involved in developing the back-end for a demand forecasting sales and planning tool.

### Technologies include:

- Establishing the ML model design and the MLOps infrastructure within the company.
- Implementing a serverless API for ML to be consumed by the front-end.
- AWS technologies: S3, EC2, AWS lambda, Neo4j, sagemaker, and API gateway.

### Achievements include:

# PERSONALITY TRAITS



## EDUCATION

2014 - 2021

**Ph.D in Mechatronics Engineering.**

Universidad Nacional de Colombia

Doctoral researcher focused on the analysis of the ankle dynamics – via big data scraping – and design of ankle-foot prostheses using advanced design methods as surrogate models and transient simulations of solid materials. *Awards:* Best GPA 2015-I during doctoral studies; full scholarship from MINCIENCIAS for PhD studies.

2018

**Research Assistant**

Indiana University Purdue University Indianapolis.

Design and construction of a catheter holder for medical applications through additive manufacturing and injection plastic processes.

2011 - 2014

**M.Sc. in Mechatronics Engineering**

Universidad Militar Nueva Granada

I developed an ankle-foot prosthesis for Colombian runners with optimal combination of carbon-fiber laminates.

2004 - 2009

**B.E. in Mechatronics.**

Universidad de San Buenaventura

- Initiated and implemented the first ML model design and the MLOps infrastructure at Mvnifest.
- Developed a scalable and efficient API for ML integration.
- Designed comprehensive documentation and cloud infrastructure.

**Mvnifest**

**Backend Engineer**

Oct 2021 - Dec 2022

I designed and maintained serverless microservices for 3PL software.

- To develop Distributed Systems on the cloud for a third party logistics company.

**Technologies include:**

- Python for custom tool development.
- Neo4J (NoSQL) as main database framework.
- AWS services included: Appsync, S3, EC2, lambda, SES, SQS, SNS, SAM, API gateway, eventbridge.

**Achievements include:**

- In charge of the design and refactoring of code modules from monolithic services into distributed systems.
- Authorization and Authentication system.
- Development of microservices either with REST or GraphQL interfaces.
- Documentation and infrastructure design on templates.

**Quantic Holdings, Inc**

**Industry Expert: Machine Learning**

Mar 2022 - Oct 2022

Part time job.

- Work with the software engineering content team to advise on and review machine learning content. Part-time work (2-5 hours per week) for a total of 130 hours.

**Technologies include:**

- Scikit-learn, TensorFlow, Pytorch, Colab.

**Achievements include:**

- Good confidence in the given advices. They extended the contract one year more.

**Universidad de San Buenaventura**

**Computational Robotics and AI**

Jul 2019 - Dec 2021

Associate professor of undergraduate and graduate program in the mechatronics department. My research is focused on the development of machines (robots) with Computer Vision and/or Machine Learning integration algorithms.

# CERTIFICATES

## MLOps

### Coursera

2/4 courses

A program that spreads best practices in industrial Machine Learning operations.

## Deep Learning

### Neuromatch Academy

Completed

A foundational program that helps you understand the capabilities, challenges, and consequences of deep learning.

## Algorithms and Data Structures

### Educative

Completed

Algorithmic techniques for solving various computational problems.

## AWS Certified ML - Specialty 2020

### A Cloud Guru

Completed

Skills to understand the complete AWS environment to perform ML projects.

- Non Linear control of the ankle dynamic joint stiffness predicted via XG-Boost algorithm.
- Development of an autonomous mobile robot for food services.
- Development of a 3D printer with IoT integration.
- Visual Inertial Navigation systems for aerial and ground autonomous vehicles.

### Technologies include:

- Python for custom tool development.
- Pandas, Scikit-learn, OpenCV, ROS, Gazebo, jupyter, Google Colab, keras, tensorflow, Pytorch, CAD, Ansys.

### Achievements include:

- Two (2) Industrial Prototypes.
- One (1) Back-end application.

### Military Industry of Colombia.

Feb 09 - Sep 14

### Research and Development Project Manager

Administrative and technical management of projects focused on research and technological development in the defense field. The duties involved were:

- Management of five (5) research projects. Total investment of two (2) million dollars.
- Monitoring transfer of the generated know-how to the implied factories.
- Technological assessment, industrial property, engineering design and manufacturing of prototypes.

### Technologies include:

- Microsoft Project, Office 365.
- Inventor, solidworks.
- Altium Designer, Matlab.

### Achievements include:

- Two (2) TV operated mobile robot prototypes.
- A variety of prosthetics for lower and upper limbs.
- Development of command and control systems for the Colombian navy.
- One (1) military vehicle prototype.
- Master Scholarship by the Military Industry.