



# NIKOLAY PRIETO

Backend AI Engineer

## HARD SKILLS

Python	8+ yrs
ML	4+ yrs
Linux	5+ yrs
Atlassian Suite	3+ yrs
Git	4+ yrs
AWS	2+ yrs
Docker	1+ yr
JavaScript	0.5+ yr

## CONTACT

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## PERSONALITY TRAITS

Reserved	Energetic
Cautious	Curious
Spontaneous	Organized
Competitive	Friendly
Avid	Modest
Confident	Nervous

## PROFILE

Backend AI Engineer specializing in designing and implementing serverless architectures on AWS for artificial intelligence applications. Adept at developing scalable and efficient systems for deploying machine learning models in cloud environments. Proficient in backend development, cloud computing, and machine learning integration.

- Serverless Function-as-a-Service (FaaS) Architecture
- AWS Cloud Computing
- Backend Development for AI Applications
- Machine Learning Model Deployment
- Scalable and Efficient System Design
- Data Preprocessing and Feature Engineering
- Python Programming
- Data Analysis and Visualization

Experienced in building robust backend systems that seamlessly integrate machine learning functionalities. Skilled in optimizing serverless infrastructure for AI workloads. Passionate about leveraging cloud technologies to create innovative and scalable solutions. Committed to staying abreast of the latest advancements in both backend development and machine learning.

Seeking opportunities to apply my expertise in designing and implementing serverless AI solutions within dynamic and forward-thinking environments.

## WORK EXPERIENCE

**Mvnifest**  
**Backend AI Engineer**

Nov 2021 - Feb 2022

Mvnifest is a third-party logistics company reinventing logistics management.

- Designed and developed a demand forecasting sales and planning tool as a Backend AI Engineer.
- Established ML model design and MLOps infrastructure, optimizing serverless architecture on AWS.
- Implemented a serverless API for ML consumption, utilizing AWS technologies: S3, EC2, AWS Lambda, Neo4j, SageMaker, and API Gateway.
- Specialized in developing distributed systems on the cloud for a third-party logistics company.
- Utilized Python for custom tool development and Neo4J (NoSQL) as the main database framework.

# 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.

**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

- Leveraged various AWS services, including Appsync, S3, EC2, Lambda, SES, SQS, SNS, SAM, and API Gateway.

## Quantic Holdings, Inc

### Industry Expert: Machine Learning

Mar 2022 - Oct 2022

Part-time job advising on and reviewing machine learning content for the software engineering content team.

- Worked with Scikit-learn, TensorFlow, Pytorch, and Colab.
- Provided valuable advice to extend the contract for one year.

## Universidad de San Buenaventura

### Computational Robotics and AI

Jul 2019 - Dec 2021

Associate professor of the undergraduate and graduate program in the mechatronics department. Focused on developing machines (robots) with computer vision and machine learning integration algorithms.

- Conducted research on non-linear control of ankle dynamic joint stiffness predicted via XGBoost algorithm.
- Developed an autonomous mobile robot for food services.
- Created a 3D printer with IoT integration.
- Worked on visual inertial navigation systems for aerial and ground autonomous vehicles.
- Utilized Python for custom tool development and various technologies, including Pandas, Scikit-learn, OpenCV, ROS, Gazebo, Jupyter, Google Colab, Keras, TensorFlow, Pytorch, CAD, and Ansys.

## Indiana University Purdue University Indianapolis.

### Research Assistant

Jun 2018 - Dec 2018

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

- Simulation, prototyping and application of medical devices.
- Utilized LS-DYNA, python, Ansys, Matlab and shell.

# 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.

## Military Industry of Colombia

### Research and Development Project Manager

Feb 09 - Sep 14

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 with a 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.
- Utilized Microsoft Project, Office 365, Inventor, Solidworks, Altium Designer, and Matlab.

## **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.