NICOLÁS ZAPATA ÁLZATE

Software Developer

PROFILE

I am a passionate Software Engineer and programmer with expertise in both Linux and Windows environments. I have developed software using a diverse range of programming languages, libraries, and frameworks. My primary focus work is in Artificial Intelligence, where I have worked on impactful projects involving Machine Learning tools. My thesis involved creating a supervised model using a meticulously crafted, manually curated training set. Additionally, I have collaborated with teams to accelerate business growth through innovative AI-driven solutions.

CONTACT

UBICATION:
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WEBSITES AND SOCIAL MEDIA:
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EDUCATION

Bachelor In Informatics Engineering - La Rioja's International University Foundation (UNIR)
February 2019 – July 2023
Emphasis of Computer Engineering, Systems Engineering and Software Engineering.

RESEARCH EXPERIENCE

Academic AI Research - La Rioja's International University Foundation (UNIR)
March 2020 – December 2022
- Collaborated with a team on multiple research initiatives focused on Artificial Intelligence.
- Developed several Python-based algorithms implementing machine learning techniques, including supervised learning and deep learning.
- Designed and executed experiments with custom datasets, refining model performance and validating outcomes.
- Enhanced our research methodology, contributing to a deeper understanding of algorithmic applications in real-world scenarios.

WORK EXPERIENCE

Software Developer – Quanam Group, Colombia
November 2023 – May 2024
- We have made several Modules for Enterprise Solutions with the Odoo16 Tool using Python, XML and JavaScript.
- Worked in Technical support, customization of modules, project management, and supervision.

IT Support – Conviventia Colombia
February 2023 – April 2023

SKILLS

Creativity
Critical thinking
Teamwork skills
Communication
Self-Investigation

LANGUAGES

Spanish (Native)
English (B2)

- Creation of a comprehensive dashboard to track and categorize entrants for the 2023 term, classifying them as Interns, Volunteers, or foreign participants.
- Technical supervision and project management

Mobile Developer (Flutter) – Vibbo
April 2021 – May 2021
As a key contributor to a startup, we were using Flutter to drive the development of a mobile application. We successfully synchronized data through RESTful APIs, extracting information from a PostgreSQL database visualized in Fast API through authentication.

Mobile Developer – Digital Brainly Solutions
January 2021 – April 2021
- Chat UI template with React Native, used for a big app for the communication with the customers.
- Creation of a sample page using Ionic and Cordova.

PROJECTS

Thesis: Coffee's image classification algorithm through training set
Made manually a training set with red and green beans of coffee from the familiar farm, and it was uploaded to a tool called Teachable Machine. This tool uses an algorithm which creates a model based on a Supervised Learning model.
Repo: *TFG Nicolas Zapata Alzate.pdf*

To do React Vite
Task list application developed using React with Vite.
Repo: *https://github.com/NicolasZapata/TodoReactVite*

Jetpack Compose Application
Mobile application for Android developed natively, it is a demonstration using the Jetpack Compose methodology in Kotlin.
Repo:
https://github.com/NicolasZapata/Jetpack-Compose-Application

Fast Web Node.js Practice
Web page developed with the Node.js tool.
Repo: *https://github.com/NicolasZapata/FastWeb-NodeJs-Practice*

Classification Tree UNIR
Classification tree made in Python with the Sklearn, pandas and NumPy. The goal was creating a classification tree using words extracted from the data of a csv format file.
Repo: *https://github.com/NicolasZapata/Classification_Tree_UNIR*

OpenCV – UNIR
Image manipulation laboratory using Python and OpenCV.
Repo: *https://github.com/NicolasZapata/OpenCV-Unir*

Data Mining – UNIR
Data processing using Python with DTale.
Repo: *https://github.com/NicolasZapata/Data_Mining_Unir-1*

Fashion Deep Learning
Created with Python and the libraries TensorFlow, Keras, NumPy and Matplotlib, training of a clothing dataset is done using floating values.
Repo:
https://github.com/NicolasZapata/Fashion-Deep-Learning---Semillero-Quinoa

CERTIFICATIONS

Introduction to Microsoft Azure Cloud Services
February 2025

Certification link: *Coursera*
Google AI Essentials
August 2024
Certification link: *Credly*
Java Career – Platzi
- **Java SE Basic Curse**
- **Java SE Advance Curse**
- **Java EE Curse**

Android Curse – Platzi
Firebase for Web - Platzi
Database Fundamentals - Platzi
Git & GitHub Fundamentals – Platzi
JavaScript Fundamentals – Platzi
Customer Care Foundation's for IT Professionals – LinkedIn

KNOWLEDGE

Android Studio
Kotlin
Java
React
React Native
JavaScript
SQL
PostgreSQL
Firebase
Flutter
Angular
NPM
Node.js
Electron
Bootstrap
Python
HTML
CSS
Microsoft Azure
AWS
Odoo

ACHIEVEMENTS

- Android projects made through mobile programming languages such as Java, Kotlin, and React Native.
- Machine Learning projects through Python and R.
- Enterprise solutions through tools like Odoo and Cloud Computing tools such as Microsoft Azure, AWS,