

NICOLÁS ZAPATA ÁLZATE

Software Developer

PROFILE

I am a passionate Software Engineer and programmer. 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

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LANGUAGES

- Spanish (Native)
- English (B2)

EDUCATION

Universidad Autónoma de Manizales.
English Diploma Program.
February 2025 – Currently
Emphasis of English, based in Cambridge English.

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

WORK EXPERIENCE

Software Developer – Quanam Group, Colombia *November 2023 – May 2024*

- Developed several modules for enterprise solutions with Odoo16 using Python, XML, and JavaScript.
- Worked in technical support, customization of modules, project management, and supervision.

IT Support – Convivenita Colombia *February 2023 – April 2023*

- Created a comprehensive dashboard to track and categorize entrants for the 2023 term (Interns, Volunteers, foreign participants).
- Provided technical supervision and project management.

Mobile Developer (Flutter) – Vibbo *April 2021 – May 2021*

- Contributed to a startup mobile app using Flutter, synchronizing data via RESTful APIs from a PostgreSQL database with FastAPI authentication.

- Developed a chat UI template with React Native for a large customer communication app.
- Created a sample page using Ionic and Cordova.

RESEARCH EXPERIENCE

Academic AI Research – La Rioja’s International University Foundation (UNIR) March 2020 – December 2022

- Collaborated on AI research initiatives, developing Python-based ML algorithms (supervised & deep learning).
- Designed experiments with custom datasets, refining models and validating outcomes.
- Enhanced research methodology for real-world algorithmic applications.

PROJECTS

Thesis: Coffee Image Classification Algorithm

Manually created a training set with red and green coffee beans from a family farm, uploaded to Teachable Machine to generate a supervised learning model.

Repository: [TFG Nicolas Zapata Alzate.pdf](#)

Todo React Vite

Task list application developed with React and Vite.

Repository: [github.com/NicolasZapata/TodoReactVite](#)

Jetpack Compose Application

Native Android app demonstrating Jetpack Compose with Kotlin.

Repository: [github.com/NicolasZapata/Jetpack-Compose-Application](#)

Fast Web Node.js Practice

Web page developed with Node.js.

Repository: [github.com/NicolasZapata/FastWeb-Node.js-Practice](#)

Classification Tree UNIR

Classification tree in Python using Sklearn, pandas, and NumPy on CSV data.

Repository: [github.com/NicolasZapata/Classification_Tree_UNIR](#)

OpenCV – UNIR

Image manipulation lab with Python and OpenCV.

Repository: [github.com/NicolasZapata/OpenCV-Unir](#)

Data Mining – UNIR

Data processing with Python and DTale.

Repository: [github.com/NicolasZapata/Data_Mining_Unir-1](#)

Fashion Deep Learning

Clothing dataset training with TensorFlow, Keras, NumPy, and Matplotlib.

Repository: [github.com/NicolasZapata/Fashion-Deep-Learning](#)

CERTIFICATIONS

- **Introduction to Microsoft Azure Cloud Services** – February 2025 (Coursera)
- **Google AI Essentials** – August 2024 (Credly)
- **Java Career (Platzi)** – Java SE Basic, Java SE Advanced, Java EE
- **Android Course – Platzi**
- **Firebase for Web – Platzi**
- **Database Fundamentals – Platzi**
- **Git & GitHub Fundamentals – Platzi**
- **JavaScript Fundamentals – Platzi**
- **Customer Service by IT Professionals – LinkedIn**

TECHNICAL SKILLS

- **programming languages:** Java, Kotlin, C, C++, C#, JavaScript, Python, Lua, SQL, Dart, HTML, CSS, R, LaTeX.
- **Development Tools:** Cline, Android Studio Arduino, Unity, Windsurf, Cursor, Visual Studio Code, IntelliJ IDEA, PyCharm, NeoVim, RStudio.
- **Frameworks:** React, Odoo, Vite, Next.js, Node.js, Express.
- **Databases:** MySQL, PostgreSQL, SQLite, MongoDB, Firebase.
- **Mobile Development:** React Native, Flutter, Ionic, Android Studio.
- **Collaboration Tools:** Notion, Trello, Jira, Figma, Git, GitHub, Docker, GitLab, BitBucket, Microservices, Azure, ChatGPT, DeepSeek, Prompt Engineering, Anthropic Claude.
- **Operating Systems:** Arch Linux, Ubuntu, Linux Mint, Manjaro, Kali Linux.
- **Artificial Intelligence:** Pandas, Numpy, Scikit-learn, Tensorflow, PyTorch, OpenCV, Keras, Matplotlib.
- **Soft Skills:** Creativity, Critical Thinking, Teamwork, Communication, Self-Investigation

ACHIEVEMENTS

- Developed Android projects with Java, Kotlin, and React Native.
- Proficient use of Linux and OpenSource tools.
- Implemented Machine Learning projects with Python and R.
- Made enterprise solutions using Odoo.