

Daniel Fernandez Lorenzo - Software Developer

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Highly motivated software developer focused on problem solving. Quick learner and capable of adopting new technologies and integrating to existing teams and workflows. Looking for an environment to keep growing while solving business problems and helping the company move forward. Focused on developing maintainable solutions with its corresponding documentation to allow for efficient team workflows and collaborative development.

Highlights

- Python usage for different tasks (**scripting for data preprocessing, desktop apps** and backend development)
- Background using distributed processing technologies such as Apache Spark and languages popular in **data engineering** and **data mining** such as Scala and Python.
- Experience working with **relational databases** such as PostgreSQL, MySQL and MSSQL designing database structures and tables.
- Motivated developer with a focus on developing **maintainable** and **well documented** solutions to solve business problems in **collaborative environments**.

Skills

Languages: Python, Scala, JavaScript/TypeScript

Frameworks: Flask, Apache Spark, ReactJS, NextJS

Databases: PostgreSQL, MySQL, MSSQL, SQLite, MongoDB

Tools: Git, KNIME, Figma, pgAdmin

Relevant Experience and Projects

2023 – Present: Freelance work developing ecommerce webapps as part of the NoHits Software Solutions group for small businesses in Miami, Florida, US.

- Used NextJS to develop webapps **integrated to third party services** such as Stripe
- Used relational databases such as PostgreSQL for storing webapps data.
- Developed admin dashboards with **custom tables** and reports for **quick data analysis**.
- Developed **custom SQL queries** to fetch all required data taking advantage of the **performance optimizations** already present in database engines.
- Designed and developed webapp features according to client requirements to solve business problems.

2022 – 2023: Solo Freelancer developed a webapp using the **Python** and **Flask framework** for a sports-oriented blog called “El Comentario” which had football-oriented content and followers and was live for 3-4 months.

- Designed and created relational databases using database engines such as PostgreSQL, MySQL and SQLServer
- Developed server api endpoints for webapp to access data in the existing database, acting as an **intermediate layer**.
- Developed data models using the recommended ORM (SQLAlchemy) to ensure **data integrity** and **serve as documentation** in the webapps.
- Designed and programmed all screens for the site.

2022: Solo Freelancer developed a **GUI desktop app** with Python for an English tutor to present content and homework exercises to their students.

- Used **Tkinter library** to develop app screens, components and interaction

Other Experience:

2024 – 2025: Developed a **distributed** outlier detection algorithm for the bachelor’s degree thesis project

- Used Apache Spark and Scala to implement the distributed outlier detection algorithm.
- Implemented a **Strategy** pattern to allow data miners to choose or implement their own strategies for some of the algorithm steps such as pivots selection and k-nearest neighbors search,
- Used **Python scripts** to preprocess data to test the developed algorithm
- Setup a local cluster using Sparks Standalone Cluster Manager to run the developed algorithm in a **distributed environment**.

2023 - 2024: Developed Python scripts to preprocess data used in data mining investigations

- Used Python to preprocess CSV files and clean data, filtering out discarded rows and applying techniques such as data normalization and binning

Education

- Bachelor Degree in Computer Science (2019 - 2025)
Technological University of Havana “Jose Antonio Echeverria” (CUJAE), Havana, Cuba