Daniel Alonso

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#### Introduction

• I'm a developer, former data scientist and teacher. I have had a very diverse set of tasks and challenges during my career but I'm always open to new challenges and ideas. Though I'm especially interested in making impact. Saving my team time and money, automating manual tasks, setting up simple infrastructure to satisfy business needs at the lowest possible cost. I like to untangle technological chaos and streamlining software/data management. I love making internal productivity leaps for the business through technology.

### SKILLS SUMMARY

• Languages: Python, SQL, Shell scripting, JavaScript, Go, R, Solidity, LaTeX, HTML, CSS, Julia, MATLAB, VBA.

Data Manip./analysis/viz/ML. Metabase. DB design, PostgreSQL, MySQL, MSSQL, ClickHouse. • Data:

• Tools: Git, GH actions, docker/compose, Kubernetes, CI/CD, networking, linux servers cloud/on-premise.

HTMX, TailwindCSS, Django, DRF, FastAPI, Fiber-go, Gin, React, ORMs. RShiny, Rmd, Dash.

Unix shells (zsh, bash, sh, etc.) y CLIs, SRE. Jira, Confluence. Spreadsheets/MS Office.

• Other: Documentation, GH Issues, Blockchain/DeFi, Agile/Scrum, Code reviews, OpenAI API, GIMP.

Passion for languages, development, teaching, writing, quality, and presenting information.

LANGUAGES

• Native: Spanish, English. • Basic: Malay, Dutch, Italian.

#### EDUCATION

## Universidad Carlos III de Madrid

Madrid, Spain

Master in Statistics for Data Science

September 2020 - September 2021

- Working with R/Python/Julia for statistical analysis, data viz. and reports and collaborative projects
- o Building statistical models, ML models, and interactive web applications with RShiny and Dash

#### Instituto Tecnológico de Santo Domingo

Santo Domingo, Dominican Republic

August 2015 - October 2019

Bachelor's degree in Mathematics and Actuarial Science

- o Studied calculus, functional analysis, actuarial mathematics, financial mathematics, statistics
- Perform financial data modelling and predictions as well as learn to code

#### Work experience

Tech Lead (Full-time)

#### **Neolux Energy**

Madrid, Spain (remote)

January 2023 - Present

- o Turning existing software useful. Saved 1-2k € monthly on infra/service costs self-hosting software.
- Cont. monitoring and management, hosting and deployment of on-premise apps (w/ docker, traefik, Cloudflare)
- o Python backend development using Django, DRF, FastAPI (REST APIs, GraphQL, ORMs)
- o Building and maintaining interactive webapps with streamlit and frontend dev. with react
- o Managing AWS infra (EKS, EC2, S3, ...), developing CI/CD using GH actions
- o Jira project management, documentation using confluence, software design decisionmaking
- Collaborating with our CTO to manage the tech team, code reviews and deployments

Study break Madrid, Spain

Career break to study and write (Full-time)

February 2022 - December 2022

- o Setting up two servers, learning about server infra, containers (docker, kubernetes) and networking
- Running an Ethereum node and several docker stacks for personal use (Nextcloud, VPN, etc..)
- o Solving smart contract auditing CTFs like Ethernaut, Capture the Ether and Damn Vulnerable DeFi
- o Learning solidity and delving into smart contract security, multisig wallets, the EVM and more
- Writing at length about topics like data privacy, cryptocurrency investments, my home server setup, etc...
- Pivoting to software development, system administration, networking, linux servers, cloud and consulting
- o Coding small CLI tools, telegram bots and other utilities and posting them on my github
- Further developing my personal website and started to write a book

Populate Madrid, Spain (remote)

Python developer & Data scientist (Full-time)

September 2021 - February 2022

- Developing a data integrity checking pipeline using Python and Great Expectations
- o Build interactive dashboards using Metabase, SQL queries and Metabase's native UI
- o Data analysis using pandas, numpy, matplotlib, metabase, seaborn, R and streamlit
- o Improving the accuracy (c. 10 pct.) of a TensorFlow deep learning model and some smaller scikit-learn models
- o Quit due to burnout and change of interests to write, study and pursue new knowledge for a while

### Cervecería Nacional Dominicana

Santo Domingo, Dominican Republic (remote)

Data scientist (Full-time)

March 2020 - August 2020

- Cleaning up and manipulating data with pandas for analysis. Building ML models.
- Clustering clients based on their product sales to target market niches
- Utilizing Azure Databricks and PySpark to deploy, clean up and tune models for sales prediction

• Quit the company to move to Spain to do my master's degree

### Referencia Laboratorio Clínico S.A.

Santo Domingo, Dominican Republic

August 2019 - March 2020

Python developer & Lead data scientist (Full-time)

- Developed automation scripts which allowed to 15-20x the output of genetic family relations tests.
- Extracting, cleaning up, processing, visualizing and manipulating data with pandas, numpy, matplotlib, seaborn
- o Constructing DBs from raw text data using python and a strong use of RegEx. Analyzing genetic sequence data
- o Quit because I felt I had made the impact I wanted to make in the company and wanted new challenges

#### Seguros Sura

Santo Domingo, Dominican Republic

Vehicle insurance subscription analyst (Full-time)

April 2019 - August 2019

- Building spreadsheets with macros (VBA) improving the quote-giving process boosting team productivity with the tool, which had some broken features that I also decided to fix.
- o Pricing/discount analysis and quoting individual vehicle insurance policies and fleets of vehicles
- o Quit to pursue new challenges as I felt I made the impact I wanted to make. The tool is still used daily.

### Sainz Tutoring

Santo Domingo, Dominican Republic

Mathematics, programming & physics tutor (Part-time)

November 2016 - May 2019

o Math, programming and physics tutor for high school and university students

# **Business Computer POS**

Santo Domingo, Dominican Republic

May 2015 - October 2015

IT Technician (Full-time)

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• Repairing and maintaining computers and peripherals / Installing and configuring software

#### Alonso & Colado SRL

Santo Domingo, Dominican Republic

Marketing manager (Full-time)

January 2014 - August 2014

o Designing ads and general image editing / Data entry, mass emailing to customers and CM

## Blog & Certifications

View all my articles, and certifications.