Daniel Alonso

Website: [dac.sg](dac.sg)   GitHub: @dreth   LinkedIn: @dreth   Email: d@dac.sg

INTRODUCTION

I'm a developer specialized in designing cost-effective infrastructure, automating manual tasks, and untangling technological chaos to help teams save time and resources. I'm driven by a passion for productivity, efficiency and transparency. Through my company, Crow Tech Pte. Ltd., my team and I provide consulting services in development, data, and infrastructure to help businesses thrive with lean, effective tech solutions.

SKILLS SUMMARY

- **Languages**: Python, SQL, Shell scripting, JavaScript, Go, R, Solidity, LaTeX, HTML, CSS, Julia, MATLAB, VBA.
- **Data**: Data Manip./analysis/viz/ML. Metabase. DB design, PostgreSQL, MySQL, MSSQL, ClickHouse.
- **Tools**: Git, GH actions, docker/compose, Kubernetes, CI/CD, Ansible, 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
    - Building statistical models, ML models, and interactive web applications with RShiny and Dash

- **Instituto Tecnológico de Santo Domingo** — Santo Domingo, Dominican Republic
  Bachelor's degree in Mathematics and Actuarial Science — *August 2015 - October 2019*
    - Studied calculus, functional analysis, actuarial mathematics, financial mathematics, statistics
    - Perform financial data modelling and predictions as well as learn to code

WORK EXPERIENCE

- **Crow Tech Pte. Ltd.** — Spain / Singapore (remote)
  CEO (Full-time) — *September 2024 - Present*
    - Working with consulting clients on software, data and infrastructure projects.
    - Developing and maintaining software, managing cloud infra, CI/CD, and monitoring.

- **Neolux Energy** — Madrid, Spain (remote)
  Intern → Backend developer → Tech Lead (Full-time) — *January 2023 - Present*
    - Turning existing software useful. Saved 1-2k EUR monthly on infra/service costs self-hosting software.
    - Cont. monitoring and management, hosting and deployment of on-premise apps (w/ docker, traefik, Cloudflare)
    - Python backend development using Django, DRF, FastAPI (REST APIs, GraphQL, ORMs)
    - Building and maintaining interactive webapps with streamlit and frontend dev. with react
    - Managing AWS infra (EKS, EC2, S3, ...), developing CI/CD using GH actions
    - Jira project management, documentation using confluence, software design decisionmaking
    - Collaborating with our CTO to manage the tech team, code reviews and deployments

- **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
    - Build interactive dashboards using Metabase, SQL queries and Metabase's native UI
    - Data analysis using pandas, numpy, matplotlib, metabase, seaborn, R and streamlit
    - Improving the accuracy (c. 10 pct.) of a TensorFlow deep learning model and some smaller scikit-learn models
    - 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
  Python developer & Lead data scientist (Full-time) — *August 2019 - March 2020*
    - 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

- ○ Constructing DBs from raw text data using python and a strong use of RegEx. Analyzing genetic sequence data
- ○ Quit because I felt I had made the impact I wanted to make in the company and wanted new challenges

Seguros Sura
Vehicle insurance subscription analyst (Full-time)
Santo Domingo, Dominican Republic
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.
- ○ Pricing/discount analysis and quoting individual vehicle insurance policies and fleets of vehicles
- ○ Quit to pursue new challenges as I felt I made the impact I wanted to make. The tool is still used daily.

Sainz Tutoring
Mathematics, programming & physics tutor (Part-time)
Santo Domingo, Dominican Republic
November 2016 - May 2019
- ○ Math, programming and physics tutor for high school and university students

Business Computer POS
IT Technician (Full-time)
Santo Domingo, Dominican Republic
May 2015 - October 2015
- ○ Repairing and maintaining computers and peripherals / Installing and configuring software

Alonso & Colado SRL
Marketing manager (Full-time)
Santo Domingo, Dominican Republic
January 2014 - August 2014
- ○ Designing ads and general image editing / Data entry, mass emailing to customers and CM

CERTIFICATIONS AND DIPLOMAS

HashiCorp
HashiCorp Certified: Terraform Associate (003)
View on: Credly
January 2025

Amazon Web Services
AWS Certified SysOps Administrator - Associate
View on: Credly
January 2025

Amazon Web Services
AWS Certified Developer - Associate
View on: Credly
January 2025

Amazon Web Services
AWS Certified Cloud Practitioner
View on: Credly
January 2025

Amazon Web Services
AWS Certified Solutions Architect - Associate
View on: Credly
December 2024

UC Irvine
Blockchain Specialization
View on: Coursera
February 2020

UC Irvine
Blockchain Specialization
View on: Coursera
February 2020

University at Buffalo
Blockchain Basics
View on: Coursera
January 2020

Wharton Online
Cryptocurrency and Blockchain: An Introduction to Digital Currencies
View on: Coursera
January 2020

Wharton Online
FinTech: Foundations, Payments, and Regulations
View on: Coursera
January 2020

DataCamp
Data Scientist with Python
View on: DataCamp
October 2019

IESE Business School
Corporate Finance Essentials
View on: Coursera
July 2019

IBM
IBM Data Science Professional Certificate Specialization
View on: Coursera
June 2019

CAREER BREAKS

Career break to study and write (Full-time)
Voluntary resignation to study and refocus my interests
Madrid, Spain
February 2022 - December 2022
- ○ 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..)
- ○ Solving smart contract auditing CTFs like Ethernaut, Capture the Ether and Damn Vulnerable DeFi
- ○ 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
- ○ 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

PROJECTS & BLOG

View all my articles y projects.