Daniel Alonso

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INTRODUCTION

Software engineer focused on Python development, backend systems, and cloud infrastructure. Experienced in building scalable applications, automating workflows, and designing cost-effective architectures. Skilled at bridging development and operations with CI/CD, AWS, and containerisation. Passionate about writing clean, maintainable code and helping teams deliver faster and more reliably. Through Crow Tech Pte. Ltd., I provide consulting in software, data, and infrastructure for companies seeking lean, effective solutions.

SKILLS SUMMARY

- **Programming languages**:   Python, SQL, Bash, JavaScript, Go, R, HTML/CSS/Tailwind CSS
- **Data/ML**:   Pandas, NumPy; modelling/ML; Metabase; PostgreSQL, MySQL, SQL Server, ClickHouse, DynamoDB
- **Cloud/DevOps**:   Docker, Kubernetes, Terraform, Ansible, GitHub Actions, Linux, AWS
- **Frameworks**:   FastAPI, Django, Node.js, React, Streamlit, REST, GraphQL
- **Practices**:   Agile/Scrum, Jira, code reviews, documentation
- **Other**:   Cost optimization, automation, technical writing
- **AI/Blockchain**:   n8n, LLM APIs; blockchain/DeFi (power user)

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 visualisation, 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
  - Performed financial data modelling/predictions and learned to code

WORK EXPERIENCE

- **Crow Tech Pte. Ltd.**   Singapore (remote)
  CEO (Full-time)   *September 2024 - Present*
  - Advised startups/SMEs on Python backends, AWS/Kubernetes, and cost controls
  - Built and maintained production services; established CI/CD, IaC (Terraform/Ansible), and monitoring
  - Reduced a client's manual ops time 8-10 hrs/week with automated GitHub actions workflows
  - Built AI pipelines to support chatbots and automated lead outreach operations through (AI powered) phone calls

- **Neolux Energy**   Madrid, Spain (remote)
  Intern → Backend developer → Tech lead (Full-time)   *January 2023 - Present*
  - Cut infra/service spend by 1-2K EUR/month via self-hosting and right-sizing
  - Built Python backends with Django/FastAPI (REST/GQL); owned schema design and integrations
  - Deployed and hosted with Docker, Traefik, and Cloudflare; improved reliability and release speed
  - Managed AWS (EKS, EC2, S3) and CI/CD with GitHub Actions; Performed code reviews
  - Built internal Streamlit tools and React UIs to improve operations efficiency 200%

- **Populate**   Madrid, Spain (remote)
  Python developer & Data scientist (Full-time)   *September 2021 - February 2022*
  - Built a data-integrity pipeline in Python with Great Expectations for public-procurement datasets
  - Shipped Metabase dashboards (SQL + native UI) and Streamlit apps for stakeholders
  - Improved a TensorFlow model's accuracy by 10% and tuned complementary scikit-learn models

- **Cervecería Nacional Dominicana**   Santo Domingo, Dominican Republic (remote)
  Data scientist (Full-time)   *March 2020 - August 2020*
  - Modeled sales data with pandas/PySpark to forecast demand and segment clients
  - Clustered customers by product mix to target niches; deployed/tuned models on Azure Databricks

- **Referencia Laboratorio Clínico S.A.**   Santo Domingo, Dominican Republic
  Python developer & Lead data scientist (Full-time)   *August 2019 - March 2020*
  - Automated genetic-testing workflows, boosting productivity 15-20x
  - Built regex-driven ETL and databases from raw text; performed analysis of genetic sequence data

- **Seguros Sura**   Santo Domingo, Dominican Republic
  Vehicle insurance subscription analyst (Full-time)   *April 2019 - August 2019*
  - Built and fixed an incomplete VBA-based quoting system that increased team quoting speed 2x

- **Sainz Tutoring**
  Mathematics, programming & physics tutor (Part-time)
  Santo Domingo, Dominican Republic
  November 2016 - May 2019
- **Business Computer POS**
  IT Technician (Full-time)
  Santo Domingo, Dominican Republic
  May 2015 - October 2015
- **Alonso & Colado SRL**
  Marketing manager (Full-time)
  Santo Domingo, Dominican Republic
  January 2014 - August 2014

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
- **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
  - Built a two-node home lab and containerised services with Docker Compose; learned Kubernetes fundamentals and networking (reverse proxy, VPN, WireGuard).
  - Ran an Ethereum node and completed smart contract CTFs (Damn Vulnerable DeFi, Ethernaut, Capture the Ether); studied Solidity, multisig wallets and EVM internals.
  - Automated personal workflows (CLI tools, Telegram bots) and documented work via technical writing on my website.

PROJECTS & BLOG

View all my articles and projects.