DR. JACK WALTON

iwalton.info

a user:11021886

iwalton3141

≥ jwalton3141@gmail.com

→ +44 (0)7834 xxx xxx

Newcastle upon Tyne, UK

"Self-driven, adaptable and passionate technologist, with expertise in data engineering and data science, seeks challenging and intellectually stimulating work in a fast-paced environment."

Education

University of Newcastle upon Tyne, UK

= 2016–2020

PhD, Applied Mathematics

@ "Bayesian Inference for Models of Collective Behaviour"

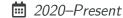
University of Newcastle upon Tyne, UK

Master of Mathematics, 1st Class

2012-2016

Experience

Data Engineer & Trainer



 Jumping Rivers Ltd.

Notable Client Projects

aws Serverless & massively scalable web app with AWS

Lead Developer

Used Docker to productionise a Bayesian network model, and parameterised PDF report and data visualisation generation, via AWS Lambda and API Gateway (github.com/nationalarchives/DiAGRAM/tree/live/api).

Developed Terraform for IaC, provisioning development, staging and production environments (github.com/nationalarchives/DiAGRAM-terraform).

Automated front and backend deployment, controlling application life cycle with GitHub and GitHub Actions.

Azure Databricks & App Service for emergency response coordination

Lead Developer

Created Databricks init scripts to install custom ETL R package from Azure Repos.

Adapted existing ETL R scripts to write results to blob storage via {AzureStor}.

Improved typical application deploy time from \sim 20mins to \sim 2-3mins.

Responsibilities & Achievements

- ightharpoonup Training tech stack product owner; prioritised, performed and delegated development and maintenance work to support delivery of \sim 150 JR training courses per annum.
- Taught over 250 hours of Python programming courses, with course difficulty ranging from "what is a variable?" to machine learning with sklearn.
- Developed and delivered courses on the probabilistic programming language Stan, data visualisation in Python, best-coding practices and how to implement them, and getting the most out of Posit (RStudio) Connect as a data scientist.
- Employed Ansible and Terraform to manage, provision and configure client and internal infrastructure, working with a number of different cloud providers (Azure, AWS, and DigitalOcean).

Skills

| Python | R | SQL | Stan | bash | git | Ansible | Terraform | Docker | Packer |

- Confident and competent speaker; adept at communicating technical concepts and data insights to non-technical audiences.
- ⚠ Capable of performing all manner of duties from a CLI, scripting in bash, and using standard command-line tools such as ssh, grep, sed, vi, etc.
- git "Intermediate" git user & version control advocate, harnessing version control on all code-based projects, and using CI/CD tools to aid code stability, dictate release cycles, and enforce good-coding practices.
- Strong numeracy skills, with an inherent understanding of Bayesian statistics, inference, model-fitting and prediction.

Community

- Chief-organiser and chair of North East Data Science meetup series, overseeing \sim 50% growth in group membership. Co-organiser of North East Databricks meetup series.
- Maintainer of jwalton.info, a programming blog and personal website which attracts 800–1000 unique monthly users, with \sim 85% of traffic acquired through organic search.

Awards

British Data Awards

March 2023

T Rising Star of the Year (finalist)

Dynamites22

Prising Star (finalist)

November 2022

Northumbrian Water Hackathon

P Best team solution

■ July 2019

UK Conference on Multiscale Biology

🗰 April 2018

T Best poster award