# **Declan Morris**

declanmorris.com

### **Personal Statement**

I am a IT Cloud Infrastructure Engineer with a passion for learning both at work and in my personal time. I have a background in chemistry as a University of York chemistry graduate (MChem -2.1). As a self educated developer I have taught myself the industry and know how important autodidactism is to an industry which is this fast paced with new technologies and changing ways of working.

## **Work Experience**

Drax Group Selby, England

IT Cloud Infrastructure Engineer

2022 - Present

- Created CI/CD pipeline templates for developers to consume to deploy to kubernetes
- Use packer and ansible to standardise linux builds
- Created terraform code to uplift previously manual AWS VM upgrades into a one click pipeline

**Drax Group**Software Engineer
Selby, England
2019 – 2022

- Wrote, deployed, configured and maintained many mircoservices key to business continuity. Ensured all were written following best practices.
- Wrote and deployed an Azure function API and all associated cloud artifacts via terraform IAC including PAAS MSSQL, VNET, linux VM configured with ansible
- $\circ$  Upgraded plant metering system and all dependant services, databases, and queries. Ensured system was resilient to pull data every minute 24/7/365
- o Created API's to securely integrate external services securely with HR data
- Wrote CI/CD pipelines as standard for every project and led the team into adoption of YAML CD pipelines

**StarCompliance**Software Developer

2018 – 2019

- Used Powershell to automate the broker release process saving a week for every broker feed release
- Fixed large numbers of C# and MS SQL server bugs
- Created SSIS packages to integrate broker dealer data into the Star product
- Analysed and tracked down SQL performance issues using pro filer, optimised SQL utilising management studio execution plans and by evaluating sql generation code
- Made improvements to the Star software deploy scripts that are used by every developer at Star to deploy and update sites on our servers
- Created a deployment tool for deploying hotfixes to every Star hosted site 200+ and upgrade them to the latest version, bringing clients critical security, performance and business logic changes. This saved our internal teams over 90 hours a month and I was nominated and awarded an internal award for the initiative to do this work.
- Found several critical software vulnerabilities in the Star application and patched these accordingly.
- Addressed vulnerabilities raised in penetration test reports and used Kali Linux and it's tool to assess software vulnerabilities
- Worked with our QA to ensure functionality was correctly tested and the test scenarios were accurate

StarCompliance York, England
Business Analyst 2016 – 2018

Managed product enhancements to ensure that features are prioritised and achievable within product sprints. Created a new workflow which involved meeting with chief business officers to get an understanding of their needs. A Perl script I wrote would automatically scan over all product backlog enhancements (~ 800) and based on a criteria set assign each a score so that the chief business officers could look over only the top items identified. I designed, documented and delivered software specifications including detailed requirements and state diagrams. I collaborated with developers, quality assurance, and client teams to gather research and functionality requirements. I assisted the technical project manager in the transition from Waterfall to a more agile development methodology.

#### Institute of Chemistry, Chinese Academy of Sciences

Beijing, China

PhD Candidate 2014 – 2015

Lived and studied in Beijing for just over one year. Explored a variety anti-icing techniques with a focus on graphene and its derivatives being used to affect ice growth in solution. Studying in China also gave me the opportunity study Chinese in my free time, I thus reached a conversational level. I decided to leave for personal reasons, however it was still a valuable experience that allowed me to improve my scientific and language skills.

DSM Geleen, The Netherlands

Intern Associate Scientist

2013 - 2014

As an MChem student I decided to undertake a placement year in industry at DSM. The project was to develop a kinetic model for the decomposition of cyclohexyl hydroperoxide. This placement gave me valuable experience in working within the chemical industry and prepared me for further work in a similar setting.

## **Personal Projects**

**Personal Website**: I have my own personal site for putting out articles on things I've found interesting. The whole deployment is IAC and the site gets updated on pushes to main.

- Deployment of the infrastructure using terraform for the vm deployment, dns
- Configuration of webserver using ansible
- Website coded using hugo and markdown for creating personal blog

**Perl Webscraper**: Wrote a basic web scraper to spider across a website and download key information and stored it in a MySQL database.

**Proxmox Home Server**: I have a custom built home server running Proxmox as a hypervisor. I follow IAC for this and the LXC containers and any VM's running on the server are created via terraform. All software and configuration is deployed and managed via ansible. I open source all of this code in my personal infrastructure repo which can be found here.

**Hospital Bedlam Game**: A group of friends and I joined global game jam to build a basic JS puzzle game.

#### **Education**

Department of Chemistry, The University of York

**York, England** 2010 – 2014

2008 - 2010

Master of Chemistry with a Year in Industry, 2:1 Honours Degree

Preston, England

A Level		As Level	
Chemistry	Α	Computing	С
Maths	Α	General Studies	C
Biology	В		

**Cardinal Newman College** 

## Languages

**English**: Fluent

Mother tongue

Mandarin Chinese: Conversational HSK 5 Certification completed in 2017

**Terraform**: Intermediate **Ansible**: Intermediate

Python: BasicPacker: Basic

#### References

References are available on request