

Declan Morris

declanmorris.com

Personal Statement

I am a University of York chemistry graduate (MChem – 2.1) who spent at time DSM in The Netherlands and Chinese Academy of Sciences in China conducting research projects. Upon my return York I started work at a software company as a technical business analyst before moving into a development role. My goal is to apply the skills I have acquired so far, and further advance them so I may develop as a software developer.

Work Experience

StarCompliance

Software Developer

York, England

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.

StarCompliance

Business Analyst

York, England

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 constantly delivered software specifications including detailed requirements and state diagrams. I collaborated with developers, quality assurance, and client teams to gather research and functionality requirements.

Institute of Chemistry, Chinese Academy of Sciences

PhD Candidate

Beijing, China

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

Intern Associate Scientist

Geleen, The Netherlands

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.

Self Employed

Chemistry and Mathematics Tutor

York, England

2012 – 2014

Working as an A Level chemistry and GCSE Mathematics tutor whilst also studying for my 2nd and 3rd year allowed me to be self employed and earn a wage whilst also keeping my scientific mind active.

Self Taught and other

Podcasts: I enjoy listening to a variety of software and security related podcasts, some of which are listed below!

- Smashing Security
- Human Factor Security
- Cyber Security Sauna
- Malicious Life

Personal Projects

Personal Website: To better understand the MVC model and the full process of creating and deploying a site to my own infrastructure I built a personal website. The website runs using the Django framework in Python. In addition to this coding exposure, I also gained valuable experience in other areas e.g.

- Git as version control
- Linux shell experience using SSH connect to my VPS
- Configuration of webserver using NGINX and Gunicorn
- Bootstrap framework
- Basic PostgreSQL backend

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

Ubuntu Home Server: I used an old desktop environment to build a home media server. It's a headless Ubuntu Server which I configure to use several dockerised apps for different home purposes

- Sanba file share
- Plex media centre

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

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

2010 – 2014

Cardinal Newman College

Preston, England

2008 – 2010

A Level		As Level	
Chemistry	A	Computing	C
Maths	A	General Studies	C
Biology	B		

Languages

English: Fluent

Mother tongue

Mandarin Chinese: Conversational

HSK 5 Certification completed in 2017

C#: Basic/Intermediate

MS SQL Server: Basic/Intermediate

Powershell: Intermediate

Javascript: Basic

HTML & CSS: Basic

Python: Basic

References

References are available on request