# James MacColl

## Platform and DevSecOps Contractor

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## Employment History

DevOps and Platform Engineer (Contract) **TfGM - Manchester** 

Mar 23 - Present

- Brought in very late on in the software development cycle to build-out, design and deliver all
  platform, app build and deployment infrastructure, pipeline and monitoring/alerting requirements for
  Manchester's new SERVERLESS "Bee Network" to a very hard deadline under great pressure.
- Suggested and helped implement many better ways of working more efficiently within and crossteams with the introduction of new processes.
- Continuous examination via PoCs and MoSCoW methods to determine whether we're making the
  correct tech decisions. For example, the last PoC was Pulumi via Typescript instead of the current
  CDK/SST implementation.
- Implemented custom IdP and IAM roles/policies/app, allowing Azure AD users to access AWS Private resources via newly created AWS Client VPN.
- Implementation of a DevSecOps approach to the application and platform delivery, starting on the
  left with SAST scanning, SSO, IAM Role/policy remediations etc, container scanning etc and a suite of
  hypothesis-based tests using various methods (chaos testing), with the ultimate goal to be
  security/resilience testing in production at any time while continuing to expand the scenario
  templates out.
- Ran internal pen testing (chaos tooling included), and liaised and remediated issues with 3<sup>rd</sup> party pen testers to meet regulatory requirements.

#### Tech Stack:

DynamoDB, AWS CDK, Typescript, Node, SST, Yarn, Cloudfront, GuardDuty, AWS WAF, IAM, Bash, CodePipeline, CodeBuild, CodeDeploy, Github Actions and workflows, Api-Gateways, AWS Lambdas, Chaos Engineering, AWS Shield, Cognito, SES

## DevOps and Platform Engineer (Contract) Santander Auto Services - Madrid

July 22 - Mar 23

- Maintaining and continuously improving cloud infrastructure, microservice-based services and CICD pipelines within a Kubernetes based platform.
- Planned, communicated out and deployed multiple major version upgrades to live EKS Clusters and all supporting plugins/packaging with no effect on live services.
- Continuously designing and implementing new and existing microservices to meet Developer requirements, while ensuring security and resilience requirements.
- Continuous examination of better solutions for all tech choices made via regular PoCs and tech talks.
- Control and organise roll out of global app Country-by-Country and support more junior members of the team in doing so.
- Implemented and configured auto-translation tooling into the site/apps.
- Implemented DevSecOps culture and tooling which went very well, and was adopted enthusiastically, see the web post my previous colleague has posted here:

https://www.santanderconsumergs.com/news/https-impulsate-between-tech-chaos-engineering

Tech Stack:

Terraform, Github, Github Actions, AWS: EC2, ECS, EKS, S3, IAM, ASGs, ELBs, RDS, Dynamodb, Lambdas, SQS, SNS. Ubuntu, Helm, various 3<sup>rd</sup> party Kubernetes CRDs, FluxCD, Weblate · PostgreSQL

## DevOps, Platform and Project Engineer (Contract) **ANS Group Ltd – Manchester**

July 21 - July 22

- - Working with Client and Client Developers on a daily basis, often to hard deadlines.

### Tech Stack:

Terraform, git, EC2, ECS, EKS, S3, IAM, ASGs, ELBs, RDS, some Dynamodb, Lambdas, SQS, SNS, PostgreSQL, Cloudformation with nested stacks, Codecommit, Codedeploy, Codepipeline, Linux, Windows, Grafana, Cloudwatch, ELK stack.

Delivered and documented x3 major client digital transformation projects from on prem to cloud.

# DevOps Platform/Project Engineer (Contract) **AND Digital Consultancy – Manchester**

Jan 20 - Aug 22

- Upgrading Data Platform and other code to terraform 0.12 and introducing module build/deployment patterns.
- Architecting and building streaming and event driven Application pipelines implementing standards, use cases and documentation (AWS Kinesis/SQS/SNS).
- Part of team migrating Oracle Fusion Middleware applications to AWS.

#### Tech Stack:

Terraform, Jenkins, Gitlab, AWS EC2, S3, IAM, ASGs, ELBs, some Dynamodb, Lambda, Kinesis, Python, AWS Kinesis Data Service, SQS, SNS, some Ruby, Chef Inspec, Packer, Puppet, Ubuntu/Redhat.

## DevOps/Release Engineer (Contract) **Plusnet - Sheffield**

Feb 19 - Jan 20

- Modernising, creating and improving existing Development to Production release CICD pipelines.
- Creating Docker-based Development and Production environments and integrating these into current environments and release pipelines.
- Introducing newly created services into Docker, and evolving them through initial development environments, through pre-prod, into production using consistent, clear and documented methods, based on a single deployable configuration file for all environments (Yaml based).
- Adapting "legacy" release processes, services and shell/python scripting to more modern release methodologies, whilst introducing improved scalability and redundancy, also improving incident response times.

### Tech stack:

Docker, Kubernetes, Git, Bitbucket, Bash, Jenkins, linux, Cloudstack, Harbor, Portainer, groovy, some java, prometheus, grafana, jira, atlassian, confluence, some maven, some puppet/mcollective, python3.

## DevOps Platform Engineer (Contract) **UK Home Office - London**

Sept 18 - Feb 19

• Security Cleared role working with modern technologies to create or improve various Home Office Services and Pipelines, under NDA cannot explain specifics.

Infrastructure Specialist
Westfield Health - Sheffield

**July 17 - Sept 18** 

Part of two-man team responsible for all business onsite, datacentre-based and cloud environments.

#### Greencore - UK-Wide

Won "The Greencore Way" Award, in recognition of business effectiveness and work performed above and beyond expectations. (Jan '17). Nominated again in April '17.

## 3<sup>rd</sup> Line Infrastructure Engineer

**Sept 15 - July 16** 

#### **Learndirect - Sheffield**

Part of 3rd line team managing, planning and implementing ongoing Infrastructure upgrades and maintenance both software and hardware throughout UK-wide network, 400 Sites, 6 local and cloud Datacentres, 20,000 Users daily.

## Senior IM&T Infrastructure Engineer (Contract)

Nov 2014 – Sept 15

## East Midlands Ambulance Service NHS Trust (EMAS) - Nottingham

Senior member of 4-man team supporting 2 Emergency Control Centres, 3 Training Centres, 2 Air Ambulance Outposts and 75 Ambulance Stations serving 4.9 million patients. 300+ Servers, 3500 +Users.

## Senior ICT Infrastructure & Systems Engineer (Contract)

Jul 2013 - Feb 14

### Arvato Public Sector Services Ltd, Working on behalf of Chesterfield Borough Council

Sole Senior ICT Engineer responsible for the implementation of new security measures and all technical work to gain Council's PSN compliance, reporting and working closely with the Council's Information Security Officer.

## Field Engineer (Owner)

Oct 2002 - Jul 13

### **Domestic Computer Services**

Provided comprehensive IT support to a large variety of regional SMB/medium sized businesses, and IT training on behalf of Derbyshire County Council

### **Education** Technical Qualifications

AWS Certified Solutions Architect Associate

**Docker Certified Associate** 

Terraform Certified Associate

VMWare VCP-DCV 5.5 – Data Centre Virtualisation

**CCNA Routing & Switching** 

Cisco CMNO Cisco Meraki Network Operator

MCP Microsoft Server 2012r2 – Installing and Configuring Windows Server 2012r2 (70-410)

CompTIA Security+, Network+ and A+

ITIL Foundation Certificate in IT Service Management

iTQ (NVQ) Level 3 in Computing

C&G Adult Teacher Award 7307, NVQ A1 Assessor Award

Various other vendor specific short courses in specialist IT areas

#### Formal

7 GCSE's all C and above

3 A Levels

### References Available upon request.