

Personal Skills

Delivery Focussed
Enthusiasm
Passion
Problem Solving
Attention to Detail
Creative Reasoning
Analytical Reasoning
Lead by Example

AWS DevOps Professional **Technical Expertise**

Fullstack Development
Web & Mobile Apps
Large Scale Systems Dev
Data Driven Systems
Event Driven Systems
DevOps
Containerisation
Virtualisation/Dockerisation
Cloud Hosting
Solutions Architecture
Technical Architecture
Enterprise Infrastructure
Enterprise Integration
Enterprise/App Security
Application Hosting
Application Development
Technical Documentation

Professional Expertise

AWS Cloud/Serverless
DevOps Lead Engineer
Agile Development
Team Manager/Leader
Development Leader
Design Authority
Solution Architect
Technical Architect
Project Management
Coaching & Mentoring

Professional

MIET (No. 25224171)
IET; since March 1990

An independent IT contractor with a passion for building solutions having extensive application, data & infrastructure experience in the IT industry across the full software lifecycle, most significantly in application development and deployment in International environments, most notably AWS, node.js and serverless. A cross-skilled hands-on Technical Solution Architect/Developer working seamlessly across multi-disciplined, geographically dispersed customer, internal, customer and supplier teams, quickly establishing confidence and trust for delivering complex IT solutions. Results focussed with agility, having a proven track record for delivering high quality solutions that focus on real business & user benefit, using strong analytical & creative reasoning to overcome problems, all the while embracing change for continuous improvement.

IT Contractor (WOZiTech Ltd)**September 2016 to present****Senior AWS Platform Engineer (Outside IR35)****Jun 2022 to July 2023**

Contracted to specialist division of framestore, working on their custom signage platform. Agile (Scrum). Responsible for AWS Architecture, security, support, API development and deployment of their cloud platform across multiple AWS accounts (OUs). Extensive CDK implementation, API integration transformation (consolidation through APIGW and CloudFront), significant asset management and caching via CloudFront, S3, lambda & SQS. Numerous new REST APIs via APIGW with both JWT and custom token authentication, OpenAPI V3.0 endpoint validation and caching integrated with DynamoDB including 3rd party API integration most notably Instagram and AccuWeather. AWS Backup with snapshot & continuous backups across DynamoDB, S3 and RDS.

Significant achievements include: React SPA SAML federated authentication via Cognito and token refresh; OnPremise server integration via SSM, with centralised CloudWatch logging, metrics and alarms along with SSM Documents for task automation; box.com integration within just two weeks working with a client's sub-contractor for a public kiosk experience in Times Square, New York; Dockerised significant Drupal app; spike to replace Drupal app with secure, extensible and scalable fully serverless solution, focusing on Step Functions; Complete handover to permanent staff with full set of Confluence documentation.

Senior Backend Engineer (Outside IR35)**Dec 2021 to May 2022**

Contracted to motorway, to one of many multi-disciplined agile scrum squads (frontends, backends, QAs, designers, Scrum Master and Product Manager), to maintain node.js microservice backend against PostgreSQL and redis data stores. This included maintaining OpenAPI specifications and sequelize data models, unit tests, PR reviews and deployment to test and production environments. Documented the "Review App" capability used in test environment to deploy shadow microservices and provided direct support to other backend engineers. Within our squad, led spikes and live incidents.

Volunteered to own the migration of the main (seller) webapp from heroku to AWS; a quarterly goal across the seller squads. Working closely with the infrastructure squad, created the migration forward load of work and oversaw the test and QA of both test and production environments, along with the non-eventful cutover to live. Worked through all issues that resulted including internal and external dependencies, CD/CI pipelines and all team comms. Supported a junior to take the lead on second webapp (photo) migration to AWS.

Significant achievements; "Being nominated for most disruptive project on one of the bi-monthly hackdays" and "Defined and brought into service a Tech Debt recovery process".

Senior Developer (Outside IR35)**May 2021 to Sept 2021**

Contracted to Digital Detox, as senior developer, to work with their newest client on a legacy unsupported internal CMS application migration to headless CMS (GraphCMS), including modernisation (automated) of manual workflows. Led client discovery sessions with multi client stakeholders, documenting sessions and agreeing detailed solution around GraphCMS incorporating the client's own technologies and processes. Define the backlog, led refinement, sprint planning and daily stand ups along with maintaining the project RAIDD log and Technical Decision Log.

Led the data migration from MySQL to GraphCMS, including the provision of staging server

Technical Skills

AWS APIGW/Proxy/Keys
AWS SNS/SQS/Kinesis
AWS SES
AWS S3 inc event integration
AWS SSM & Documents
AWS lambda/step function
AWS Cognito inc SAML
AWS Backup
AWS RDS
AWS DynamoDB
AWS DocumentDB
AWS IAM
AWS EC2/ALB
AWS ECR
AWS EKS/BeanStalk
AWS Cloudfront
AWS Certificates
AWS Route53
AWS CloudWatch,metrics,alarms
Akamai Edge Server
kafka (non-commercial)
DynamoDB/DocumentDD/
redis
AngularJS/JQuery/React
nodeJS/jest
nest.js/GraphQL
Java/hibernate/springboot
Jenkins, Puppet Enterprise
AWS CDK (typescript)
Terraform, Ansible, Circle CI
JIRA/Confluence/Trello
Stash/BitBucket/git/CodeCommit
Ionic/Capacitor
JSON, XML, XSD and XSLT
New Relic monitoring/alerts
Linux/UNIX
Windows Desktops/Servers
Networks (Enterprise)
vmware/Citrix/KVM/Vagrant
Web Services & SOA
SQL DB including MySQL &
PostgresSQL
NoSQL DB MongoDB & Slack
Integration
Many COTS & GOTS
Many Bespoke applications

and database (AWS mysql), migration scripts (SQL to JSON), GraphCMS schema design and GraphQL mutations to GraphCMS, including node.js streams, concurrency control, error capture & replay. Owned and solved all problems that arose during migration, significantly the migration of rich text. Led the export of data from GraphCMS to internal application via existing XML (no schema); this included working directly with the client's content team to resolve data inconsistencies.

Liaised with the GraphCMS product and technical team; highlighting areas of concern and how to get the best performance for bulk loading of migration data.

Platform API Engineer (Concurrent)

Nov 2019 to May 2021

Contracted to News UK, first onsite then owing to pandemic fully remote, to design, build and maintain Audio Platform a secure GraphQL API for collating and presenting a common set of data for recognisable digital brands including talkSPORT, Times Radio and Virgin Radio. Development, test, deployment and support, with mentoring (*8) and technical leadership.

A set of microservices (nodejs/typescript/fully automated unit/components via jest) hosted primarily on AWS EKS with complementary AWS services, viz. S3 with Cloudfront (CDN, Certificates/Route53 and DocumentDB, fully provisioned via terraform and deployed using Circle CI with some legacy Jenkins. terraform provisioning included maintaining New Relic monitoring traces and alert conditions and fine grained IAM roles and policies, across multiple AWS accounts. Local (dev) AWS access via OKTA single sign with multiple roles.

This is an agile (fortnightly scrum) project split across multiple locations, including London and Sofia (Bulgaria), with all the usual ceremonies including, daily stands up, weekly refinements, planning, showcases and retrospectives. With an eye for detail, a key contributor to the backlog. With broad experience and a keenness to collaborate, often praised for thoroughness of spikes. With a delivery focus, invariably complete sprint goals. With engineering discipline, established good practices for repeated high quality releases. By knowing the subject and the audience, made showcases fun. Ready to jump on a whiteboard, even while working at home during 20/21 pandemic.

Extended Kong (API Gateway), with rate limiting, and Auth0 "jwt" authentication against Graph API microservice. Implemented GraphQL with Authorisation header (Auth0 JWT token) edge caching working directly with the Akamai technical consultants, including a stale data workaround.

Not just audio platform, responsibilities extended to internal middleware team. Still node.js with jest based unit and component testing but now with integrated PACT contract tests still via Circle CI in AWS EKS.

Technical Lead (Concurrent)

April 2020 to Aug 2021

French Estate agent startup, to revolutionise private sales (www.achetemoifrance.com). Inherited the development of an i18n Java spring boot, thymeleaf and PostgreSQL web application. Quickly established a separated environments and a product board (trello), with bug and feature backlog. Introduced daily stand up and established priority driven set of tasks (agile kanban). Sourced, recruited and onboarded Java freelancers via upwork, operating as scrum master, QA and release manager, responsible for preparing and deploying releases in test, showcases and production deployment.

Established a serverless backend (serverless framework/node.js) with terraform provisioning of fine grained AWS IAM resources; daily currency import, rep task maintenance and multi-language email templates using AWS lambda, step functions, CloudWatch Rules, SES and SNS. Import and export integration with 3rd party, with secure separation between Internet and database. Combination of batch async and sync processing owing to limitations in apimo restful API.

Technical Lead (Concurrent) - More info on online resume

Aug 2020 to Jan 2021

UK Estate agent (FIND IT 360) start up (<https://dt5u06afskblg.cloudfront.net/>). Agile development (kanban); responsible for identifying, refining, estimating and prioritising backlog, release preparation and deployment, showcasing, and invoicing.

Mobile first, ReactJS web application with redux. Leading two ReactJS UK freelancers (mentoring, pair programming and code review); testing and merging of their code. Data served via AWS S3 accelerated using AWS CloudFront secured by AWS Certificates with registration/RBAC login via AWS Cognito. API provided by AWS APIGW secured via Cognito JWT. Developed and deployed using "serverless framework" lambda (nodejs) consuming AWS

Personal Details

-  **London, UK**
Address on request
-  **Contact numbers on request**
-  **jobs@anglo-dutch.me.uk**
-  **1972**
-  **Full UK Driving License**
-  **British Full UK Passport**
-  **SC (NPP3) Clearable**
UK DBS Vetted

1994 Master of Engineering (MEng)

Electrical & Electronic Engineer at Loughborough University of Technology

1990 5*A-levels (3*Grade A, 2*Grade B)

Pure Mathematics, Applied Mathematics, Pure & Applied Mathematics, Physics and Electronics

Interests & Hobbies

Knitting, DIY, Gardening

References are available on request.

SES for email notifications. Separate dev, test, acceptance and production environments (AWS Route53), provisioned by terraform and locked down via fine grained AWS IAM roles/policies. Integrated Ionic framework with Capacitor provisioning iOS and Android apps, including setup and configuration of App Store/Play Store accounts with tester distribution. QRcode treasure hunt promotion. Innovative swipe left/right (tinder style) property portfolio.

Backend API Developer

Dec 2018 to Sept 2019

Contracted to Sopra Steria UK, agile (scrum) as backend API designer and developer (nodejs) with full responsibility translating requirements to API deployment, consumed by Angular SPA deployed on Gov PaaS covering API namespace, JSON schema, endpoint security (JWT), transactions & idempotency. Datastore postgres; responsible for the schema design, patching and mapping through API to JSON schema. Included substantial property level change audit logging. Secured clean ITHC report.

Introduced AWS SNS, Secrets & Lambda for workflow integration with Slack (webhook, slash commands & dialogs). Demonstrated AWS QuickSight for analytic visuals. Introduced AWS Kinesis and MongoDB Atlas (M10), streaming changes in data in backend API to an Internal CMS (strapi) deployed into AWS via terraform (VPC/EC2/IAM) with reverse callbacks to backend. Secured clean ITHC report.

Microservice Designer, contracted by Semantic Integration

Jan 2018 to Sept 2018

Contracted to 'photobox UK'. Introduced extensive documentation along with exhaustive JSON Schema documentation/validation and JSON examples to be consumed by the engineering team. Worked closely with the engineering team to ensure proper implementation of data model, including the rationale (benefited from my node.js/React knowledge). Introduce a data model test framework, using Jest (with ES6), node.js V8.x on top of nest.js (typescript) with GraphQL including Jest to generate JSON data examples using a builder style syntax.

Seconded into the Editor agile engineering team to help with full stack development; node.js microservice development, ReactJS frontend development and GraphQL development. Worked closely with the architects to design and prototype a fully AWS serverless solution using DynamoDB, lambda, Kinesis and Step Functions which included lambda functions running puppeteer and rendering React, with automated Jenkins build pipeline for CI/CD.

DevOps Lead Engineer, con^d by Cap Gemini at Home Office

Sept 2016 to Dec 2017

DevOps role in an agile project environment working on client site. Mastered Jenkins and adopted Puppet for CI/CD. Built a virtual (KVM) environment for puppetised guests, with custom PxE bootstrapping puppet; able to provision a fully functional KVM service within one hour. Crafted a puppetised "Release Dashboard" using JQuery and PostgreSQL JSON showing what version of application (+8) and components (100+) are deployed to which environment (30+) when and by whom. Built a fully puppetised reverse web proxy with SSL offloading and email routing (postfix) to multiple security domains and deployment across multiple security zones.

IT Consultant (Various Clients & Roles)

September 1998 to August 2016

CGI, formerly logica formerly CMG - More info on online resume

Solution Architect at Central Government Department (Concurrent) **June 2015 to August 2016**

Solution Architect in CGI Centre of Excellence (Concurrent) **June 2015 - January 2016**

Solution Architect at Central Government Department **June 2012 to May 2015**

Technical Architect on Central Government Managed Services Prog **Oct 2006 to June 2012**

Various including Shell (five years), npower (one year) **Sept 1998 - Oct 2006**

Technical Architect, Team Leader, Developer MSI (Mobile Systems Internal) **May 1996 to Sept 1998**

Software Engineer - Ferranti-Thomson Sonar Systems Ltd **Oct 1994 to May 1996**