

Technical Expertise

DevOps
Solutions Architecture
Technical Architecture
Enterprise Infrastructure
Enterprise Integration
Enterprise Security
Application Hosting
Virtualisation
Cloud Hosting
Application Development
Fullstack Development
Technical Documentation

Professional Expertise

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

Personal Skills

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

Professional

MIET (No. 25224171)
IET; since March 1990
STEMnet; since July 2014

Industry Experience

UK Government
Oil
UK Defence
UK Gas & Electricity
Mobile Telecommunications

Technical Skills

AWS Cloud/Serverless
AWS Kinesis/Secrets
AWS SNS/SES
AWS IAM
AngularJS/JQuery/React
NodeJS/Express/MongoDB
nest.js/GraphQL
Jenkins, Puppet Enterprise
JIRA/Confluence/Stash
JSON, XML, XSD and XSLt
Linux/UNIX
Windows Desktops/Servers
Networks (Enterprise)

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 recently node.js backend API and serverless.

A cross-skilled hands-on Technical Solution Architect/Developer working seamlessly across multi-disciplined, geographically dispersed customer, internal and supplier teams, quickly establishing confidence and trust for implementing 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.

More than just a vocation, promotes IT Enablement. Computing is both a profession and a hobby, keeping abreast of latest technology and supporting talent progression.

IT Contractor (WOZiTech Ltd)**September 2016 to present****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, for primary use by SPA frontend (Angular) 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 Secret Manager to simplify CI/CD with sensitive information extending to allow serverless (AWS lambda) with external reporting. Introduced AWS SNS, Secrets & Lambda for workflow integration with Slack (webhook, slash commands & dialogs). Demonstrated AWS QuickSight for analytics 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; automated AWS deployment using terraform. Secured clean ITHC report.

Between Contracts**Sept 2018 to Dec 2018**

Whilst in between contracts, have rebuilt office server using vagrant/ansible (now fully automated), learnt terraform to create/destroy VPC with public/private subnets and bastion and have written my first Alexa skill.

Microservice Designer, contracted by Semantic Integration**Jan 2018 to Sept 2018**

Contracted to 'photobox UK' with primary role data modelling and microservices designer. Extended existing enterprise data model, adding additional domains (Physical Properties, Editor, Design and Planboards) incorporating input from local prototyping, architecture, product and production teams (France). 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). Seized opportunity to introduce a data model test framework, using Jest (with ES6), node.js V8.x (await/async) on top of nest.js (typescript) with GraphQL. Extended this framework, using 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, React.JS frontend development and GraphQL development. Worked closely with the architects to design and prototype a fully AWS serverless solution using DynamoDB, lambda, Kenesis and Step Functions which included lambda functions running puppeteer and rendering React. Have continued to develop, build and deploy this solution into production whilst mentoring a Photobox engineer in AWS serverless development. Included the implementation of a role (dev & ops) separated serverless framework alongside an automated Jenkins build pipeline for CI/CD. Most recently crafted and engineered a microservice & data facade to the enterprise data model introducing the "Personalised Product Definition" to abstract the Editor and encourage independent engineering, along with an Auth0 review and specification for endpoint authentication and authorisation.

DevOps Lead Engineer, contracted by Cap Gemini at Home Office**Sept 2016 to Dec 2017**

First DevOps role, one of three Lead Engineers in a team of twelve in an agile project environment working on client site, providing project and support to multiple platforms with multiple technologies, having mastered Jenkins and adopted Puppet for CI/CD, typically provisioning new environments in local and remote secure environments. Built an initial virtualisation (KVM) environment for puppetised guests, having identified the need for a custom PxE boot solution bootstrapping puppet with multiple networks; able to provision a fully functional KVM service within one hour. Built a production custom build & deployment solution, on top of an existing undocumented custom solution, using Jenkins, Stash, puppet enterprise, yum and Nexus. 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. Puppetised and took live a private cloud hosted JIRA & Confluence, with Crowd with upgrade and migration from local LDAP instance. Reworked the existing custom deployment solution to deploy across multiple security zones and consolidate the solution across multiple environments. Augmented the custom build & deployment solution for multiple long-term release git (Stash) branches, including the handling of component versions between branches, using Jenkins, groovy, PostgreSQL and bash scripting.

vmware/Citrix/KVM
Vagrant/VirtualBox
Web Services & SOA
SQL DB including MySQL &
PostgreSQL
NOSQL DB MongoDB &
DynamoDB
Slack Integration
Terraform, Ansible
Many COTS & GOTS
Many Bespoke applications

Personal Details

 London, UK
 Address on request
 Contact numbers on request
 jobs@anglo-dutch.me.uk
 02/08/1972
 Full UK Driving License
 British
 Full UK Passport
 SC/DV Clearable
UK DBS Vetted
Sponsor: STEMnet

AWS Certified Solution Architect & Developer Associate

Architect till Feb 2021/Developer till Nov 2020

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
Volunteering (Code Club as STEMnet Ambassador), DIY, Gardening, Computing (Cloud, Raspberry PI and Electronics).

References are available on request.

Fullstack AWS Developer, WOZiTech Ltd

Sept 2016 to Sept 2017

Development of "wit-wedding" application suite for real time posting of pictures and messages before, during and after my wedding in September 2017. *wit-weddingServe*: NodeJS RESTful backend application with MongoDB data store running on AWS EC2 integrated with AWS S3, 1and1 IMAP/SMTP and MessageBird SMS. *wit-piDash*: an SPA web application (jQuery) running on Raspberry PI using Web Socket push technology and an SPA served from AWS S3 bucket. Current projects include resin.io RaspberryPI, Electron/VueJS dashboard and AWS Lambda/Kinesis video streaming - "wit-stream".

IT Consultant (Various Clients & Roles)

September 1998 to August 2016

CGI, formerly logica formerly CMG

Solution Architect at Central Government Department

April 2016 to August 2016

Pioneered two development projects utilising latest web technologies including AngularJS, NodeJS/Express, Handlebars and MongoDB, with automated build using Gulp. Responsible for concept development, application development, mentoring junior developers, solution definition, solution architecture, solution sponsorship and solution promotion. Built and demonstrated proof of concepts and have recently secured project funding and significant client interest. This client success has led to the Senior Management Team creating a new position of "Innovation & Prototype Lead".

Solution Architect at Central Government Department

June 2015 to August 2016

Provided Technical Leadership within the CTO supporting high profile and complex projects. Leading a team of fourteen Architects having mixed disciplines including applications, infrastructure, technical/operational security and Information Assurance. Directed change and delivery across multiple projects. Technical lead & lead developer on a secure *reverse application web proxy* with *RESTful services* and *web sockets*. Supported the transition of legacy web application to cloud with continued operational integration with secure hosted applications.

Solution Architect in CGI Centre of Excellence

June 2015 - January 2016

Led the development of an open source proof of concept display replacement, using Raspberry Pis, MySQL, PHP, Python and RHEL integrating with a HTML web source; successfully passed vulnerability assessment as part of ITHC ahead of UK national rollout.

Solution Architect at Central Government Department

June 2012 to May 2015

Built a SECRET production/DR & preproduction App Hosting environments for 400+ Virtual Servers and 50+ applications, leading a team of network, storage and server engineers. Created an enviable relationship with end users, business and supplier; a relationship exploited with follow on work. Became known as a trusted advisor through honesty and thoroughness of approach. New Capability Technical Team Manager responsible for a team of twelve senior TDAs of multiple disciplines and six BAs. Responsibilities included team line management and project assignments. Continuous client successes resulted in creation a new custom role in September 2014; that of Innovation Lead within the client's own Digital Transformation team. Within just six months, leveraged previous business relationship to secure a project integration with another Government department.

Technical Architect on Central Government Managed Services Prog

Oct 2006 to June 2012

Led the demonstration of virtualising a business critical legacy SPARC Solaris application; coined the term "App-In-A-Box"; the first demonstration within CGI at the time. Transitioned the application to production data centre hosting. Developed extensive knowledge on complex Application Hosting and established self as a trusted deliverer of complex IT. Often called upon for my knowledge of the hosting and wider infrastructure provided by separate supplier for expedited change & delivery.

Various including Shell (five years), npower (one year)

Sept 1998 - Oct 2006

Worked on many projects during this time in various positions, including architect & developer on a global distributed messaging interface to SAP IDOCs using *OpenTrade with C++ and Oracle DB* for Shell and a variety of small technical consultancy assignments using *Tibco, Iona Orbix and BEA Tuxedo*. Many projects as Lead Technical Architect on client sitebased in London with projects across Europe including Netherlands, Germany and Italy.

Key Achievements at CGI

Promotion of STEM and Open Source technologies (Member Engagement). Web Service data exchange utilising latest technology in XML deep content inspection & enforcement. Firewall audit reporting. Fully virtualised a legacy Sun Solaris/Oracle (BEA) WebLogic application; the incumbent supplier said it couldn't be done. Global distributed messaging solution interfacing with SAP.

Technical Architect, Team Leader, Developer

May 1996 to Sept 1998

MSI (Mobile Systems Internal)

Started as a developer (C++) on greenfield microcell model, with automated test harness with rapid, followed by design, development and unit test of enhancements to flagship product, resulting in team leader responsible technical & quality delivery. Included trips to Turin, Italy to deploy microcell model for 1st customer.

Software Engineer

Oct 1994 to May 1996

Ferranti-Thomson Sonar Systems Ltd

Designed, built, unit tested and implemented three large MOD projects, including a sonar 'simulation training environment' using tri-screen Sun workstations with X-Motif and C++, a reusable framework for the generic handling of distributed events and a PC-based multi-threaded message router for a £multi-million simulator, integrating 200+ transputers/300+ DSPs. Reviewed design documents and other developers' code.