

Mark Edwards

FIAP · MBCS

Software Engineer

Python · TypeScript · Java · AWS · Cloud Infrastructure

📍 Sunbury on Thames, Surrey

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🔒 SC Clearance eligible

PROFILE

Software engineer with over 25 years of experience designing and building complex systems across energy, financial services, government, and enterprise environments. Currently developing the back-end infrastructure and services powering Aurora Energy Research's energy modelling and forecasting platform, where a recent infrastructure migration project reduced annual compute spend by nearly \$1M. Brings a strong background in systems integration, cloud infrastructure, and scalable back-end development, alongside the communication and delivery skills developed across a long career working with major organizations including Deutsche Bank, Royal Dutch Shell, BT, and Thomson Reuters. Previously cleared to SC level with the UK Ministry of Defence and eligible for re-clearance.

EXPERIENCE

Aurora Energy Research Limited

May 2024 – Present

Software Engineer

Part of the core scrum team responsible for the back-end services and infrastructure underpinning Aurora's commercial energy modelling and forecasting software. Primary language is Python, with TypeScript and Java maintenance responsibilities alongside. Key contributions include:

- Led the migration of the core engine execution environment from Amazon EC2 to a hybrid on-premises / EC2 architecture, reducing the company's annual compute spend by nearly \$1M.
- Developed and maintained back-end services handling large-scale energy model execution, result storage, and downstream data delivery.
- Contributed to infrastructure-as-code tooling using AWS services including CloudFormation, working within a CI/CD delivery pipeline.
- Active participant in agile ceremonies; collaborated closely with modelling, data, and front-end teams.
- Worked within an agentic-first engineering culture, routinely collaborated with LLM-based tools throughout the development lifecycle – from design and code generation through to testing and review.

Core stack: Python · TypeScript · Java · AWS (EC2, CloudFormation, S3) · Linux · Git

Atos / Eviden / Engage ESM

July 2021 – January 2024

Senior Solutions Architect

Reported to the Chief Digital Officer with a broad remit spanning technical innovation, architectural oversight, and pre-sales support across the Atos ServiceNow practice. Responsibilities included defining technical architectures for enterprise clients, mentoring development teams, and driving technical strategy for the wider practice portfolio.

TESM Ltd / DXC Technology

February 2017 – July 2021

Advisor Solutions Architect

Invited into the role by the CTO of TESI (subsequently acquired by DXC Technology). Delivered solution design and architectural leadership across large-scale projects and bids for clients in financial services, government, and telecoms sectors, including several classified engagements requiring SC clearance.

Skyline Consulting Limited (Independent)

September 2010 – February 2017

Director & Principal Consultant

Founded and ran an independent consulting practice delivering enterprise systems integration and platform implementations for major organisations. Notable engagements included:

- Deutsche Bank – ServiceNow engineering; rebuilt core platform modules during a major platform transition.
- Bupa – Full reimplementation of internal IT employee portal in under three weeks.
- Arup – Change management system enhancements.
- Nestlé – Major upgrade of HPSM environment including a new Change and Release Management module; rollout to 10,000+ users globally.
- UBS – ServiceNow Knowledge Management solution and bulk data change capability.

Infrasolve Limited / Innovise PLC

2001 – September 2010

Senior Consultant

Senior consultant specialising in enterprise systems integration and infrastructure management platform delivery. Worked extensively with clients including Thomson Reuters, Royal Dutch Shell, British Telecom, Nestlé, IBM, Siemens, and Philips, in roles spanning technical lead, project lead, and subject matter expert.

- British Telecom – Technical lead on HP SM7.01 deployment as part of HP's Blueprint ITSM solution; designed and implemented a ServiceCenter Web Services eBonding layer integrating multiple external service desks and network alerting systems.
- Thomson Reuters Markets – Senior architect and project lead for a global Asset and Configuration Management system used by several hundred users worldwide, integrating with Oracle Financials, SAP, and multiple bespoke systems; improved data compliance from under 30% to over 90%.
- Royal Dutch Shell – Development of enhancement requests and defects against an existing HP ServiceManager 7.11 system within aggressive release windows.

Electronic Data Systems (EDS)

October 1998 – April 2001

Senior Technical Peregrine Analyst

Provision of technical support, systems administration, beta testing, and training delivery for EDS's European internal systems portfolio, including Peregrine AssetCenter, Remedy ARS, and a bespoke billing system. Also developed VB/VBA interfaces between internal systems.

W&D Breweries Ltd.

1996 – 1998

Technical Support Specialist

Desktop and server support across two sites (VAX/VMS, Unix, Windows NT). Involved in SAP R/3 Sales Order Processing rollout and Microsoft Exchange deployment.

TECHNICAL SKILLS

Languages	Python (primary), TypeScript / JavaScript, Java, C / C++, PHP
Front-end	React, React Native
Cloud & Infra	AWS (EC2, S3, CloudFormation, Lambda), Ansible, Linux/Unix
Databases	PostgreSQL, Microsoft SQL Server, Oracle RDBMS, Sybase, MySQL
Tooling	Git, CI/CD pipelines, Agile / Scrum
AI / Agentic Dev	Agentic development workflows, LLM-assisted engineering. Personal projects include building a C compiler in collaboration with AI coding agents.
Prior platforms	ServiceNow (through Tokyo), HP ServiceManager / AssetCenter, IBM Tivoli

CERTIFICATIONS & PROFESSIONAL MEMBERSHIPS

Professional Memberships

- Fellow of the Institution of Analysts and Programmers (FIAP - #24217)
- Professional Member of the British Computing Society (MBCS – #990629146)

Project Management

- PRINCE2® Registered Practitioner (AXELOS Reg. #9980039655172275)

Microsoft

- Microsoft Certified Professional (MCP): Analysing Requirements & Defining Solution Architectures
- Microsoft Azure Fundamentals (AZ-900)
- Microsoft Azure AI Fundamentals (AI-900)

Other

- Cisco Networking Essentials
- Peregrine Systems Certified Applications Engineer (AssetCenter)

EDUCATION

2020 – Present	Open University – BSc (Hons) Computing & IT (Software) – in progress
1989 – 1993	University of Newcastle – Computing Science
1984 – 1989	Netherstowe School, Lichfield – 10 O Levels, 1 AO Level, 4 A Levels

ADDITIONAL INFORMATION

Security Clearance	Previously cleared to SC level with the UK Ministry of Defence; eligible for re-clearance.
Nationality	British Citizen
Languages	English (native)
Interests	Motorcycles, long-distance running, computing, music, animation, film
References	Available upon request