

CAMERON PATTERSON

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I began my career with IBM and AT&T, attaining Chartered Engineer status and CCIE certification architecting, supporting and implementing the networks of key multi-national customer accounts. Following these positions, I achieved life-long ambitions to travel around the world, attain my PhD and to form my own consultancy – where I worked directly with energy and financial sector clients to optimise their critical international infrastructures. I currently lead and develop the infrastructure and IT support areas of a mid-sized multi-site financial business, making great strides to improve the operational performance and responsiveness of both teams and systems.

My unique blend of demonstrable leadership, communication and technical skills across multiple sectors, combined with in-depth analytical, transformational and R&D skills position me as a prime candidate to play a strategic role in helping solve your organisation's key forward challenges.

PROFESSIONAL CERTIFICATIONS – all actively maintained

- **C Mgr** – Chartered Manager with CMI #P04462800
- **C Eng** – Chartered Engineer with the IET #32351828
- **EurIng** – registered European Engineer with FEANI #27547
- **Cisco** – CCIE: Cisco Certified Internetworking Engineer #5634, Routing & Switching Full Lab
 - Cisco certifications also maintained in areas of wireless, network security, design and IP telephony (CCNA-W, CCSP, CCDP and CCNP-Voice)
- **Juniper** – JNCIA-Junos Certification, **Brocade** – Professional Certifications in Ethernet Fabric (BCEFP) and Networking (BCNP), **Microsoft** – MCP Windows Server 2012
- **Prince2** – practitioner, **ITIL** – foundation

CAREER HIGHLIGHTS

Mar/2015 – present Head of Infrastructure & Service Delivery /
Network Engineering Manager (Curo Transatlantic)

- Responsible for setting the direction of IT Infrastructure provision and its 24x7 operational support in a fast-moving financial technology sector business across office, data centre & retail estates – enabling a resilient, always-on online ecommerce presence
 - Transform and architect the IT systems, improve and introduce new site / equipment resilience, and deploy up-to-date public and private cloud solutions
 - Pro-actively create new processes and procedures, including the major incident plan used across the business, reworking and maintaining others
 - Ensure currency with industry best-practice, technical advances and developments, and introduce innovative solutions to the company
 - Work in concert with the US parent company to harmonise and efficiently operate cross-group, with a goal of uninterrupted supply of service to the business
 - Cultivate collaborative relationships with internal stakeholders and external vendors, negotiating and managing budgets and optimising IT costs
 - Maximise availability of 24x7 ecommerce operations.
- Underpin all operations with a security-first ethic
 - Protect our customers, the business and our staff with security in-depth
 - In compliance, attain and retain our FCA business licences, PCI-DSS certifications and coordinate all further audit activities to maintain trust throughout the enterprise
 - Continual review of practices, software and hardware, across end-point, edge and remote access technologies
 - Ongoing security education of end-users.

- Update & Maintain Technical skills
 - Continue with hands-on activities across compute, network and storage equipment including Dell EMC, Cisco Catalyst, Nexus and UCS and campus technologies
 - Update and add new technical skills, renewing and acquiring technical certifications
 - Completing technical training to maintain currency and attending vendor events
- Create and maintain the structured IT budget plan
 - Normalise IT-led change as an enabler for the business rather than just a cost-centre
 - Outline a 5+ year roadmap of IT refresh, renew and replace to flatten budgetary planning, whilst sweating assets to optimise their value and serviceable life
 - Introduce new vendors / technologies strategically to provide necessary facilities and expertise to the business, enabling innovation and minimising IT bottlenecks
 - Rationalise supplier lists and renegotiate contracts to optimise cost and functionality across hardware, software and services
 - Maintain a strategic staff plan interlinked with performance metrics.
- Motivate and develop the IT operational staff
 - Manage IT Infrastructure and Support functions, restructuring to remove barriers and to improve levels of first-time-fix and success in project delivery
 - Virtualise the IT support function across two UK locations with staff in both, improving the user experience
 - Work pro-actively with team members to set their specific goals within my defined teams framework – mentoring, coaching and assisting in their developmental choices
 - Lead the recruitment / right-skilling of the IT teams, including working with HR to create job specifications, advertisements and to head up the recruitment process.
- Manage and develop active stakeholder relationships
 - Determine and help steer direction of travel, ensuring that IT operational strategy is prepared for what the business asks of it and is rarely on the critical path
 - Produce CBAs to justify business spends and identify areas of research for proof-of-concepts, ensuring rapid availability of flexible infrastructure services
 - Being accountable for the UK IT operations of the business, whether that is for web, production, test and development, analytics or data science teams – and for my teams' delivery of IT services and tools to enable others to perform optimally.
- Maximise business uptime
 - As a 24x7 business, key to IT's success is to maximise system serviceability
 - Introduce redundant, load-balanced, multiply monitored systems
 - Provide visibility of the live health of IT systems across operational groups
 - Enable pro-active decision taking around capacity planning
 - Directing preventative maintenance to occur before operational incidents
 - Deliver regular reports detailing KPIs, metrics and targets
 - Liaise with business areas to take their goals end-to-end from inception at marketing all the way through to project delivery and their level 1-4 integrated support
 - SLA backed service management using off-the-shelf and bespoke ITIL aligned tooling
 - Act as single-point-of-contact for all operational and escalated support issues.
- Continual business improvement
 - Perform a root-and-branch review of the IT estate to identify and address weaknesses using redundancy and rework or, where not cost-effective, to have procedures and insurances in place
 - Plan and introduce a second UK data centre to tackle issues of availability and single-points-of-failure, fully updating existing compute, storage and network facilities – providing tangible business performance gains & enabling improved DR / BCS
 - Research, evaluate and introduce complementary public cloud services to the business following cost-benefit and security analysis
 - Introduce a full asset management plan ensuring that the most is made of the IT software and hardware estate, including Microsoft licence optimisation.

Feb/2014 – Mar/2015 Lead Telecommunications Consultant (Contract, ConocoPhillips)

- Technical lead for the Europe, Middle East and Russian operational support team
 - Design, refresh and maintenance of data centre, wired and wireless campus LAN, IP telephony and network optimisation technologies
 - Devised creative service solutions to meet business needs and constraints in the challenging environments found both on- and off-shore, making use of diverse providers and access technologies whilst liaising business-wide
 - Equipment used encompassed Nexus, modular and stack-based switches, Cisco PRIME, ASR, CUCM, ASA, VPN and Riverbeds, with QoS deployed across the estate
 - Took responsibility for the professional development of members of the operational team, so that every individual had the opportunity to grow technically across the full range of technologies whilst remaining fully supported.
 - Broadened my exposure to alternative vendor technology for comparative technical evaluation, completing professional certifications for Juniper and Brocade systems.

Sep/2008 – Jan/2014 Computer Network Engineering (Manchester University)

- Communications and development of command and control systems for the SpiNNaker high performance Artificial Intelligence computing platform
 - Developing flexible, real-time software for mapping, routing, network management and visualisation of system, AI and machine learning information
 - Developing an SNMP MIB for use with Nagios, Cacti and other industry standard monitoring and management tools
 - Scripting in Perl and Python, and low-level network programming in C and assembly
- Creating high-quality, rigorous technical documentation
 - Lead and contributing author to more than 15 peer-reviewed journal and conference articles and presenting results at international conferences
 - Awarded a PhD as part of my work in the areas of real-time communications and management: "Managing A Real-Time Massively-Parallel Neural Architecture"
 - Developing and delivering education and lab materials and providing support for Mobile Systems & Computer Networks units
- Consulting on department switching and routing networking decisions, security, strategies and assisting in troubleshooting issues
- Leading software development team for unit delivery of package to place, route and interconnect modules across the high-performance networked system
- This role encompasses both the Medical Research Council funded PhD, Sep/2008 – Jun/2012 and staff position of Research Scientist, Jun/2012 – Jan/2014.

Jan/2005 – Jun/2008 Financial Sector Telecommunications Consultant (Contract)

Jan/2006 – Jan/2007 Royal Bank of Scotland Group

Jan/2005 – Jan/2006, May/Jun 2008 Standard Life Group

- Provided design leadership and operational technical support for highly-available internal and Internet communication services supporting thousands of users
 - Creation of data centre standard equipment configurations and documentation
 - Testing and evaluation of network hardware devices and software releases
 - Led team and planned datacentre switch software upgrade programme
 - Proof of concept testing for secure internal and multi-homed BGP Internet and MPLS VPN connectivity services
 - Working with strategic partners and key stakeholders across the business, particularly in change and incident management
- Responsible for LAN / WAN network security, quality of service and voice over IP telephony
 - Using Cisco ACS, TACACS+, MQC, and developing scripts to consistently deploy, maintain and test configurations and their security compliance

- Worked implementing Cisco Call Manager and IPCC call centre software, defining its design and interfaces to the public telephone network and Nortel VoIP solutions
- Developing management scripts and tooling, out of hours 3rd level support and working closely with the customer to build and develop their troubleshooting skills
- Specification, tendering and bid / technical evaluation of equipment and suppliers
 - Liaising with global telecommunication vendors for ADSL and dialup home connectivity solutions, and for diverse high-capacity Internet circuits
 - Developing and maintaining relationships with key equipment providers
- Presentation and demonstration of KPIs and new solution proposals / research to both executive and engineering teams at all levels
- Technical Design Authority with pre-sales responsibilities
 - Working closely with accounts and sales teams to identify leads and opportunities.

Jun/1999 – Jan/2005 Team Leader / Network Architect (AT&T Business, AT&T Labs)

- Team leader for 15 strong UK and European network implementation group
- Product and process development for new services at network core and edge
 - Consolidating xDSL technologies across multiple European telecom markets to provide consistent, marketable, secure MPLS networking solutions
 - Defining and testing provisioning toolsets for global deployment, and interfacing with reporting and management tools including Concord, Tivoli Openview etc.
- Team leader for multiple, large-scale, successful global customer networking deployments
 - Managed a team of 10 engineers on the EMEA deployment of IBM's next generation Power9 internal network using AT&T's MPLS service. Carried out resource and project planning, work allocation, managing escalations, and globally led the global interconnection migration work
 - Led an international team of 12 on an accelerated MPLS and voice network deployment for Maersk Sealand at over 300 sites worldwide
- Creation of laboratory environment for proof-of-concept (POC), training and development
- Writing standards and procedures documents, detailing best practice and minimum specifications for secure network implementations across multiple services
- Devising and delivering educational materials within Europe and Africa, both in person and using tele-presence tools and software.

Aug/1996 – Jun/1999 Telecommunications Specialist (IBM Global Network)

- Creation of tooling and automation to minimise provisioning error rates / group workload
- Responsible for infrastructure capacity management and trend analysis
 - Introduced statistics to forecast demand and ensure available capacity
 - Produced business cases for new infrastructure investment
- Mentoring and coaching new employees to the group
 - Including both employees on the graduate scheme and experienced hires
- Devised the concept and business case for a region-wide "virtual team"
 - Created documentation to ensure consistent high-quality customer implementations
 - Developed and presented 3-day training courses in support of this initiative hosting overseas virtual team members and delivering sessions on-site across Europe.

EDUCATION & SKILLS

- **PhD Computer Network Engineering:** Manchester University
- **B Eng (Hons)** [First Class]: Computer Systems Engineering, Lancaster University
- **A Levels:** Computing, Pure & Applied Mathematics, Physics
- **GCSEs:** English, Mathematics, Dual Science, Geography, History, I.T., Design Technology
- **Level 5 management diploma:** CMI
- **Clean, full U.K. driving licence.**

OUTSIDE INTERESTS

- **Travelling:** Including round the world in the first 4 months of 2008
- **Sports:** Hiking and walking, following motor racing and its telemetry, playing badminton
- **Broadcast:** Real-time distribution and delivery of voice / video data, and playing active technical and leadership roles at many voluntary radio stations across the country including:
 - *Lancaster:* <http://www.bailriggfm.co.uk>, elected to positions of Chief Engineer and latterly Station Manager. My most significant achievement in this role was creating the successful application for the UK's first permanent FM student radio station
 - *Edinburgh:* <http://castlefmScotland.com>, (formerly Leith FM), Duty Management and Chief Engineer roles, including completely re-engineering all the station's technology
 - *Manchester:* <http://www.fusefm.co.uk>, presenting and technical team roles, helping mentor the next generation of broadcast engineers.