

Profile

Owing to a lifelong fascination with every aspect of computer science and a yearning to know how things work, my primary skill set and background is information technology systems and networks. Within that domain my interest is extremely broad and includes a wide range of disciplines, many of which I seek to continually develop as part of my career and others I indulge in purely as hobbies. I'm an open and conscientious individual with an eye for detail, which has often led to me being the primary or sole engineer of numerous systems in previous employment. As a confident communicator with a good work ethic, I can perform equally well within a team or as an individual, solving problems and achieving goals in the most efficient way available. I am currently studying for industry-recognised Cisco and Linux certifications in my spare time. My Myers–Briggs Type Indicator is consistently evaluated as INTP.

Employment

DevOps Engineer CloudCall Leicester, Leicestershire Feb 2019–Present

Duties include: strong knowledge of Linux internals, system administration and configuration; working with wide range of AWS products (EC2, ECS, ELB, S3, Lambda, Aurora, RDS, DynamoDB, SQS); configuration management and automation with Salt Stack; infrastructure management with IaC solutions (AWS CloudFormation and HashiCorp Terraform); administration and maintenance of Linux infrastructure including web servers, databases, message queues, API gateways, DNS servers, logging and storage; close collaboration with the development team and supporting the Jenkins-based CI/CD pipeline; configuration of LAMP servers (CentOS Linux, Apache, PHP, MySQL, Nginx, HAProxy); development work as required, writing scripts (Bash, Python); application containerisation via Docker and orchestration via Kubernetes; usage of ELK stack (Elasticsearch, Logstash, Kibana); use of monitoring and logging systems to track health of application platform at all levels; appropriate preemptive and reactive actioning of alerts generated by monitoring systems; analysis of time-series data to identify problems and potential improvements; strong understanding of IP networking and routing technologies including BGP and OSPF; configuration of networking hardware (switches, routers and firewalls / security appliances); domestic and overseas travel to upgrade physical infrastructure situated in data centres and other points of presence; maintenance of RFC1930 Autonomous Systems and liaising with Internet exchange peering partners; assistance with continual improvements of global network architecture; assist in the expansion of the CloudCall platform onto company hardware and into the public cloud; management of product SIP telephony infrastructure and billing platforms; assistance in addressing the backlog of technical debt within the department; working within the NOC, itself part of the larger Infrastructure team; interaction with the Support department to help diagnose and resolve platform issues

Research & Development Engineer Smartrack Coalville, Leicestershire Jun 2015–Jan 2019

Duties included: researching ways to improve and expand company asset tracking solution and operations; risk management and minimization; IT and development project management in accordance with industry-standard PM frameworks/methodologies; authorship of technical documentation; designing, curating and implementing IT and information security policies in accordance with ISO/IEC 27000 family of ISMSs; assistance with ITIL implementation for internal service management; configuration and management of heterogeneous network routing and security equipment, including Cisco IOS, Cisco ASA, HP Comware and HP ProCurve platforms; from-scratch implementation of systems infrastructure, including fault-tolerant multi-node server cluster backed by highly-available multitier storage network; administering a Microsoft Windows Server-based ecosystem (Active Directory, Hyper-V, Failover Clustering); management of and development for Avaya ISDN PBX telephony system, Google G Suite productivity and collaboration platform, Salesforce CRM and Force.com PaaS cloud computing platform

Data Center Hardware Operations Engineer Google Ghlin, Belgium Feb 2015–Jun 2015

Duties included: contributing to efforts in deployment, maintenance and support of current and new data center infrastructure; resolving critical or escalated technical issues over a significant population of affected equipment; testing new server hardware components and designs; configuring and troubleshooting Linux-related issues on servers; taking part in the development of processes and documentation for new areas of work or knowledge

Support Engineer (12 months), Software Engineer (21 months) Roscom Derby, Derbyshire Apr 2012–Dec 2014

Duties included: knowledge of company software code base; conceptual design, algorithmic design and implementation; adherence to regular release/upgrade schedule according to software life cycle; strong coding competence in various languages and frameworks; fixing problems on customer systems within SLAs; strong knowledge of company hardware/software revenue assurance solution (and training customers and colleagues to use it); solid understanding of business change process

Previous Roles (Summarised for brevity) Jul 2006–Apr 2012

[Telecom] Support Engineer; IT Manager; IT Administrator; Programmer

Technical Competencies

When exploring a new topic, I will typically seek to gain an abstract and conceptual understanding of it rather than settle for rote memorisation and repetition, which I find dry and unsatisfying. My dispassionate and unbiased approach to information technology is a strong example of this; I take no sides with any particular technology vendor, nor do I limit my understanding to their specific way of solving a problem. As such, I have elected to summarise here the various broad areas of interest in which I have considerable experience, only identifying relevant exposure to specific software or solutions by name if I feel it noteworthy and have not already done so above.

Networking equipment (routers, switches, security appliances) and NOSes (IOS, Junos, Comware, RouterOS)

Internet protocol suite (TCP/IP, DNS, DHCP, TLS, OSPF, IPv6, Ethernet)

Unix shells and scripting (Bash, ZSH)

GNU/Linux (Enterprise Linux, Debian & derivatives)

Systems programming (C, C++, Java, Python, Go)

Desktop and server operating systems (Windows, macOS, FreeBSD)

Full-stack web development (LAMP, MVC, MEAN)

Virtualisation (Microsoft, VMware, KVM, bhyve) and containerisation (BSD jails, LXC)

VoIP (SIP, IAX)

Animation and non-linear video editing (Blender, FCP)

Typesetting and document formatting (LaTeX, ConTeXt)

Education

A-levels (5 awards) Ashby School Ashby, Leicestershire

2004–2006

Mathematics; Further Mathematics; Physics; Computing; Electronics

General Certificates of Secondary Education (11 awards) Ashby School Ashby, Leicestershire

2002–2004

Mathematics; Electronics; Double Science; English Literature; English Language; French; Economics; Double ICT; Humanities

Experiences

Excursion to Southeast Asia

Aug 2009–Sep 2009

In the name of cultural and technological exploration, a friend and I toured 6 cities across 4 separate countries, experiencing several unique cultures and meeting a wide variety of different people.

Wireless LAN Event

Apr 2005

Just as consumer wireless networking was beginning to enjoy widespread adoption I attended the Wireless LAN Event; a conference and trade show centered around the technology and related innovations, hosted at the Olympia in London.

Work Experience at Container Components Europe Limited

Jul 2004

During the school summer holiday I voluntarily took part in a work placement at a plastics manufacturing plant in Chesterfield. I spent time with almost every part of the production process; from CAD/CAM to distribution to finance.

Work Experience at National Grid Transco plc

Dec 2003

While studying at Ashby Grammar School, I spent a week in the real-world working environment of a major utility company as part of the school's work experience programme. I had a taste of several departments including IT / Desktop Support, Operations and Engineering.

Linux User & Developer Expo

Apr 2003

Already a competent Linux user, I attended the Linux User & Developer Expo hosted at Birmingham's National Exhibition Centre. I also attended the conference again when it ran the following year at the Olympia in London.

Interests & Achievements

Understanding how things work is often a real driving force for me. I'm technically-minded and like many subjects under that umbrella; those which I am most passionate about include computer science, hardware and software engineering, digital media, spoken languages, geography, cosmology, voice acting and good food. I also like drinking many different teas.

I have a keen interest in digital media, specifically photography and cinematography. It has served to record family memories, to document excursions and been instrumental in larger projects. I'm into computer animation and would like to pursue this hobby further at some point.

While not yet fully conversational, I have loose proficiency in European Spanish and a beginner's understanding of Japanese. I actively practice both languages on a daily basis.

I enjoy driving my car but I also ride a motorcycle and love to travel, and have lived abroad for a while. I have a recently-renewed UK passport and a full driving licence that's always been clean.