

# Stuart Macleod

## Infrastructure Architect & Systems Engineer

### PERSONAL SUMMARY

Highly organised and motivated architect, systems specialist and team leader, with broad experience of all aspects of system management for cloud-based web apps and supporting services.

### EXPERIENCE

#### Senior Technical Project Manager Akamai Technologies – January 2019 – Present

My current role requires coordination of Professional Services for some of the largest internet-facing brands in the UK. The work runs the gamut from pure project management to platform design work to writing new software tools for customers, all while working under the strictest SLAs and performance criteria in the industry. Frequently I provide web performance workshops, enterprise architecture reviews and work with developers on automation projects to scale their infrastructure to global scale, all with a focus on customer engagement and ROI.

#### Infrastructure Architect Trainline – September 2017 – December 2018

This role required me to pull together various disparate strands of systems design to facilitate the roll out of a variety of web apps in a hybrid AWS/on-premise cloud environment. Trainline are a highly ambitious, quickly expanding brand, utilising an Agile, DevOps approach to their platform. The role therefore required coordination of networks, databases, systems engineering, Site Reliability Engineering and support, all of which in concert with large numbers of development teams with their own infrastructure requirements and timescales. Additionally, the role required large amounts of technical documentation, advising on new technologies and generally being a go-to resource for overall strategy and platform design.

#### Lead Platform Engineer Trainline – October 2016 – September 2017

My role here was to lead a team of Windows and Linux systems administrators, covering all aspects of infrastructure management not handled by our Database and Network specialist teams. Including, but not limited to: Systems administration, build automation and bootstrapping, CI design, all Site Delivery work described below, patching & OS-level upgrades and any other work requiring attention. We work closely with front-end



- *CDN configuration, management, optimization & automation*
- *HTTP Load balancing, with particular expertise in Nginx and AWS tools*
- *Web Performance Improvements: edge caching, HTTP/2, optimized design principles*
- *Containerized design: Kubernetes & Docker, server and client side*
- *AWS SysOps: EC2, S3, VPC design, CloudFormation*
- *Infrastructure as Code implementations: Config management (Puppet, Powershell), Git and associated CI methodologies and tools (Terraform, Gitlab, Teamcity)*
- *TLS Certificate management and deployment, internal PKI design*
- *Scripting in Python, Ruby, Powershell Lua and others. REST APIs in particular*
- *Advanced systems admin in Linux and Windows, particularly automation*
- *MS server stack: Active Directory/DNS/DHCP, Exchange, SQL Server*
- *IP networking, WAN and VPN technologies, on premise and in cloud*

teams to design solutions to persistent problems, improve compute efficiency to reduce cost, and implement new technologies in a scalable, resilient way, maintaining year on year availability of just shy of 99.99%.

#### **Tech Lead – Site Delivery**

**Trainline – August 2015 – October 2016**

I led a team of engineers responsible for all edge-network design and configuration for a suite of websites processing over £2bn pa in transactions. Responsible for all aspects of Load Balancing, certificate management, CDN configuration, DNS management & PKI, as well as designing and maintaining solutions to ensure credit card security and PCI compliance. Extensive scripting and API interaction to automate solutions in several languages, as well as AWS cloud configuration and maintenance.

Spearheaded the migration of load balancing services from on-premise physical devices, to cloud-based logical ones, with zero unplanned downtime or loss of revenue.

#### **Desktop Support Team Lead**

**Trainline – May 2014 – August 2015**

Led a team of engineers managing all levels of internal IT support functions for a company of around 600 users across 3 countries and 2 continents. Covered all aspects of Server management, Exchange/Office 365, OS build & deployment, backups etc., as well as ITIL service desk operations, client relations, stakeholder & SLA management and distribution of work.

#### **Server & Applications Support Technician**

**Edinburgh College, December 2011 – May 2014**

2<sup>nd</sup>/3<sup>rd</sup> line systems support for an estate of around 100 Windows and Linux servers, and associated applications, for up to 35,000 users. Deployment and management of virtual platforms, SAN storage and required network infrastructure, building physical host servers and performing extensive migrations to virtualised infrastructure. Ensuring highest levels of uptime, as well as DR/BC planning and testing, backup technologies and all types of general maintenance operations for academic and support staff teams.

#### **ADDITIONAL INFORMATION**

I try to take a relaxed approach to all things, and make every effort to contribute to a fun working environment wherever I am, regardless of the external pressures of the job. I play and write music for a number of musical groups, which has allowed me to travel and meet a wide variety of people, as well as getting into weird and wonderful situations; from jamming with blues musicians in Chicago, to playing with convicts in a prison in Edinburgh.

#### **ACADEMIC QUALIFICATIONS**

**University of Edinburgh**

*MSc by Research, Musical Software Design – 2005*

*BMus (Hons), Music Technology – 2004*

#### **PERSONAL SKILLS**

- Excellent spoken & written communication skills
- Autonomous worker
- Adaptable and innovative thinking

#### **PERSONAL DETAILS**

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*DOB: 05/06/1982*

*Driving License: Yes*

*Nationality: British*