

# James McDonald BSc (Hons)

## PROFILE

Versatile, enthusiastic IT professional with over ten years' experience. Currently looking for a challenging new role in southern Buskerud or Oslo.

## BACKGROUND

System, network and database administrator for a wide variety of companies and organisations. Extremely proficient at networking, management of Internet and database services and support of migration from proprietary to free and open source software solutions. Skilled application designer and software developer experienced in diverse environments, platforms and languages.

## AVAILABILITY

Immediate

## KEY TECHNICAL SKILLS

### SYSTEM ADMINISTRATION

Linux and UNIX  
Debian, Ubuntu, Redhat,  
Oracle, CentOS, MacOS X,  
FreeBSD, OpenBSD, Solaris  
Windows XP/2000/2003  
Virtualisation  
VMware, Xen  
Business continuity  
Disaster recovery planning  
Backup management

### APPLICATIONS

Apache  
Nginx  
Postfix  
Exim  
Samba  
Tomcat  
Asterisk  
Exchange 2000, 2003, 2007

### NETWORKING

Design & deployment  
Management & monitoring  
Security  
Certificate management  
VPN  
IPSec, L2TP, PPTP, OpenVPN  
GPRS, 3G/UMTS, APN  
management

### DEVELOPMENT

C, C++, Objective-C  
Cocoa, iPhone, UNIX, TCP/IP, X11  
Python  
SQL  
Perl  
PHP  
UNIX environment  
Bourne/C shells, sed, awk  
Java/J2EE

### DATABASE ADMINISTRATION

Oracle 9i, 10g, 11g  
PostgreSQL  
MySQL  
SQL Server 2000, 2005, 2008

### HARDWARE

PC server & desktop  
(HP/Dell/IBM et al)  
Apple  
Sun  
Cisco routers, switches, PIX/ASA  
Check Point Firewall-1  
Juniper NetScreen

## EDUCATION

BSc (Hons) Computer Science, Heriot-Watt University, 2005

## PROFESSIONAL MEMBERSHIPS

Professional Member of the British Computer Society (MBCS)  
Registered iPhone Developer

## DRIVING LICENCE

Full, clean UK driving licence

## REFERENCES

References are available upon request

## **EXPERIENCE**

### **SYSTEMS MANAGER EMEA, SECUREWORKS UK LTD, SEP 2009 - JUN 2010**

SecureWorks is a market leading provider of world-class information security services with more than 2,800 clients worldwide.

General responsibilities included installation, configuration management and monitoring of server applications, management of the client estate, establishment and enforcement of security policy, network design recommendations, changes on internal and customer switches and firewalls and design and deployment of redundant SQL Server database solutions.

The estate includes Windows and Linux servers and clients, Linux appliances and Cisco, Check Point and Juniper network appliances.

Responsible for the integration of the dns and SecureWorks corporate networks after SecureWorks acquired dns. This involved unification of Active Directory domains and migration of multiple servers and services, 100 client machines and 70 users to the new infrastructure. Specific requirements included network connectivity between sites in Edinburgh, London and 4 SecureWorks locations in the USA; migration to a common Exchange 2007 platform; integration and migration of internal applications and a smooth migration process for end users. The migration was successfully executed within 3 months and highly acclaimed within the company.

Participated in development of a high performance Snort-based sensor. Responsible for integration and debugging of custom packet capture interface in the Linux kernel.

### **CONSULTANT, VETNOSIS LTD, NOV 2008 - SEP 2009**

Vetnosis is a research and consulting firm specialising in global animal health and veterinary medicine.

Designed and developed a suite of web applications using MySQL and Pylons (Python) to replace a core business application originally built on Microsoft Access. Performed data migration including resolution of character encoding issues. Implemented hosting, monitoring and management procedures for these applications.

### **MIS MANAGER, VIANET LTD, FEB 2007 - NOV 2008**

Vianet provide M2M (machine to machine) connectivity services based on GPRS/3G and VPN technology, and telemetry services for the vending and cashless payment industries.

Designed and implemented the core network for interconnection of the four major UK mobile network operators and customers. Developed a J2EE-based SIM provisioning & VPN management system to support this. Created a standard Linux-based Java/Oracle application platform to support a multi-tiered development environment. Specified hardware, software and storage requirements for the next generation of the vending telemetry platform. Responsible for ensuring software licensing compliance and business continuity including hardware/network redundancy and management of backups. Third line support for GPRS/3G modems/routers and VPN connectivity for over 100 customers and 30 internal users. Line manager of second line support technician. Developed a variety of tools in Java, PL/SQL and Python including an HTTP gateway for DNS updates, a filter for messages sent over GPRS reducing protocol overhead costs by up to 30% and an SSL certificate management application. Managed Ubuntu, Redhat and Oracle Enterprise Linux, Windows 2003, Oracle 9i/10g, Exchange 2003, Cisco routers and ASAs and desktop operating systems. Deployed and maintained Apache, Tomcat, JBoss and Jonas servers.

### **NETWORK ENGINEER, INTRONET APPLICATIONS LTD, NOV 2005 - JAN 2007**

Intronet managed recruitment for IBM worldwide (excluding America) and LogicaCMG based on in-house software which they hosted.

Responsible for maintaining the recruitment application in addition to office and development services. This involved management of Linux and Windows servers. Technologies in use included Apache, Tomcat, JBoss, SQL Server, Oracle and Exchange. Managed several internal projects focussing on specification and maintenance of systems and storage, and deployment of new technology into existing environments.

## **STUDYING BSC COMPUTER SCIENCE, HERIOT-WATT UNIVERSITY, OCT 2003 - JUN 2005**

### **SYSTEMS TEAM LEADER, SYZYGY UK LTD, SEP 2001 – SEP 2002**

Syzygy are a pan-European interactive design and hosting provider specialising in web sites and online advertising.

Deployed, managed and maintained a variety of systems including Solaris and Linux servers, Cisco routers and SonicWALL firewalls. Responsible for design and implementation of network security and of a global monitoring solution, co-ordination of infrastructure development, redevelopment and management of IT support help desk, redesign of email infrastructure, design of redundancy solutions, maintenance of legacy Solaris servers, installation and management of Linux and Solaris servers, Oracle and MySQL databases and of Apache and Netscape Enterprise web servers; Apache Tomcat server solution, development of a mailing list management system and Perl, Java and Python development and debugging.

### **SENIOR SYSTEM ADMINISTRATOR, APAMA (UK) LTD, FEB 2001 – JUNE 2001**

Apama develop a software product (the Apama Matching Engine) which is capable of very rapidly spotting trends in multiple concurrent streams of data such as location information or stock market prices.

Management and maintenance of all computing facilities. Planned and implemented a server room in new premises. Designed and built an international network based on PIX firewalls and Cisco series routers connecting three sites in Cambridge, San Francisco and Amsterdam. Responsible for deploying a Windows 2000 infrastructure on this network, including Exchange 2000. The existing Linux and Sun infrastructure was then integrated with this.

### **SYSTEM ADMINISTRATOR, STREETS ONLINE LTD, MAY 1999 – FEB 2001**

Streets Online were an e-commerce company selling books, CDs, DVDs and games online. They were the largest such reseller in the UK in 1999. The company was sold to the Kingfisher group in 2000 and became an online brand for their MVC high-street store.

Beginning as a junior system administrator, progressed to head a team of 6 system administrators and support personnel. Responsible for managing a network consisting of 20 Sun servers ranging from E420R to E6500, 10 Linux machines and Cisco routers and switches. Many of these machines were required to have 24/7 availability for the company's e-commerce application. Management of web servers, domain registration and DNS, routers, Linux installation and maintenance, backups and support. Working with Apache, Oracle, Legato Networker and a variety of in-house system management tools and applications. Co-ordinated the efforts of the team as a whole reporting to senior management. Responsible for redesigning the search engine and development work in C, Perl and Java of inhouse applications.