

CONTACT

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PROFILE A talented and enthusiastic systems engineer with extensive experience in semantic web development, service-oriented architectures and programming in a variety of languages. Good leadership skills and able to efficiently work alone or as part of a multi-disciplinary team. Extensive linux, scalability, networking and virtualization knowledge in parallel with Windows desktop and server administration experience.

TECHNICAL

SKILLS **Programming:** Python, Django, Java, Perl, Puppet, C, C++, Qt, MySQL, Postgres, XHTML, CSS, Javascript, Linux/UNIX shell scripting, Git, SVN, CVS, Bazaar, Hudson, Selenium

Applications: Adobe Creative Suite, Microsoft Office, Blackberry Enterprise Server, Microsoft Windows Server, Active Directory & Exchange, OpenOffice, Pro/Desktop CAD & Proteus ISIS

Operating Systems: Ubuntu, Debian and CentOS linux, VMware ESX & ESXi, XenServer, KVM, Microsoft Windows 7/Vista/XP/2000 and Server 2008, Apple OS X, Solaris, and numerous other Linux/UNIX distributions.

Network Technologies: iSCSI SAN, GlusterFS, Cisco IOS, Monitoring with Nagios, Munin and Zabbix, MySQL replication (native, and Tungsten Replicator), MongoDB, Message Queues (RabbitMQ), High Availability & Scalable Network Architectures.

EDUCATION **University of Birmingham**, Birmingham, West Midlands

DipHE, Bioinformatics

September 2004 to February 2008

- Research Interests: Synthetic and Systems Biological Modelling in C++

The Chase, Malvern, Worcestershire

September 2000 to July 2004

A-Levels

Computing **B**

Biology **C**

Chemistry **C**

Physics AS **B**

GCSEs

10 GCSEs **A-C**

EMPLOYMENT **Glasses Direct Ltd**, Oxford Circus, London

HISTORY *Systems Engineer* August 2011 to October 2011

- Built puppet configs for configuring a group of Amazon EC2 servers.
- Built a high-level management interface for controlling EC2 instances, and tracking their expense.
- Architected the system for a new e-commerce platform from a hardware level.
- Created a development and testing environment using Vagrant and VMware ESXi.
- Wrote a system for storing Nagios configurations in MongoDB.

Football Radar Ltd, Notting Hill, London

Systems Engineer/Developer

July 2010 to August 2011

- Utilised KVM virtualization on my workstation to aid the design of a new server infrastructure for the web application platform.
- Implemented an emergency server system on the Amazon EC2 cloud, to allow greater scalability.
- Migrated all services from a single underpowered VPS, to a much more powerful cluster of Dedicated Servers.
- Leveraged the scalability and flexibility of Amazon EC2 cloud to achieve instant performance increases.
- Reinforced existing backup procedures with a dual-site offsite backup schedule.
- Designed and implemented an online recruitment site for the company, and a new public-facing corporate website.
- Integrated a wiki (Mediawiki) and forum (vBulletin) into the intranet.
- Incorporated a number of supplier data feeds into the company application server infrastructure.
- Architected the growth of the office network, from a few PCs to nearly 50 workstations, and dual load-balanced ADSL lines.
- Set up a RADIUS authenticated Cisco remote-access VPN to the office.
- Responsible for all IT purchasing and procurement.

Assanka Ltd, Shepherds Bush, London

Systems Administrator

July 2009 to July 2010

- Implemented a Hudson Continuous Integration server to help improve unit-testing and code quality, including front-end testing with Selenium.
- Responsible for maintaining a number of servers using Puppet.
- Conducted extensive R&D work for implementing a virtualized infrastructure using a variety of technologies including KVM, VMware ESX and XenServer.
- Improved existing backup routines by adding a tape backup service.
- Managed the office network, and improvements including organising the installation of a Leased Line.
- Worked to improve general stability and reliability by expanding the service presence into a second data center.
- Planned and implemented a high-availability MySQL cluster using Continuent Tungsten replication technologies.
- Specced and planned a number of new hardware servers, including negotiation with suppliers.

DB Education, Brighton, East Sussex

Systems Administrator

July 2008 to July 2009

- Designed various plugins for both Nagios and Munin to monitor a number of services across the network of over 100 servers.
- Developed the corporate website with MODx open source CMS.
- Migrated the office software licensing model to a volume license key.
- Carried out hardware and software management and repairs to a variety of server platforms and office computers.
- Migrated the corporate wiki from Twiki to Mediawiki.
- Responsible for the security and updates of the office and london networks.
- Conducted the migration of MX records between providers for the E2BN primary school network.
- Coordinated the replacement of the office air-conditioning system, from research to budget approval, to final replacement.

University of Birmingham Hallsnet, Birmingham, West Midlands

Junior Network Technician

September 2004 to Jul 2005

- Controlled network access at switch level, utilising IOS commands on Cisco hardware.
- Analysed network traffic across multiple networks using wireshark, to locate bottlenecks and malicious IP traffic.
- Implemented a secure, firewalled office network, and CentOS database servers to keep records of users bandwidth quotas.

INTERESTS

In my spare time, I am a keen photographer and I upload many of my photos to Flickr. I love travelling, and have visited Ireland, France, Germany, Spain and several destinations within in the USA in recent years.

I have been a Linux user since early 2002, initially using Slackware on an old PC to host my own website, and now using Ubuntu as my daily desktop at home and at work. I also use Windows 7, Vista and XP and have recently been working with Windows Server 2008.

I write a tech blog on my [personal website](#), discussing the systems and software which I use day to day. I recently started a new community project: <http://isdisconnected.info> which is concerned with monitoring the state of the global internet in times of political unrest.

I am also an active member of [ServerFault](#), where I frequently both ask and answer questions on a variety of systems administration topics.