## Philip G Cass BEng (Hons)

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## **Employment History**

# Computing Support Officer, The University of Edinburgh, School of Philosophy, Psychology and Language Studies

(August 2013 – Present)

Duties include front-line reactive support for mostly Windows and Apple computers, as well as printers and some desktop Linux support. I have special responsibility for approximately 100 dual-boot Windows/OSX laptops issued to PhD students, including inventory tracking, deployment, warranty repair, maintenance and support.

I also administer a small group of Linux servers used for genetics processing by the Centre for Cognitive Ageing and Cognitive Epidemiology (CCACE), including hardware, OS upgrades and storage management.

During this time I have undertaken several additional projects, including commissioning and configuration of a school VMware virtual machine server, and the planning, implementation and maintenance of two Nagios monitoring systems to track CPU load and disk space for PPLS and CCACE's servers.

## IT Officer, The University of Edinburgh, Division of Clinical Neuroscience (2006 – 2009)

As part of my degree I spent a year working for the Division of Clinical Neuroscience as an IT Officer. My primary responsibilities were front-line desktop reactive support, which included:

- Commissioning new desktop computers
- Diagnosing and repairing software and hardware errors
- Acting as a first point of contact for all support queries and coordinating with central University of Edinburgh support staff when necessary

In addition I was responsible for several special projects, including:

- Developing web-based medical research tools
- Data retrieval from an obsolete database
- Implemented secure drive erasure procedures
- Implementing hard disk drive encryption procedures for laptops
- Implementing a port scanning system to catalogue services running within the network

During this time I studied for and attained MCP in Installing, Configuring and Administering Microsoft Windows XP Professional. After my sandwich year, I continued to work there part-time for two years.

#### McDonald's Restaurants Ltd, Edinburgh

Shift Running Floor Manager (2003 - 2006)Floor Manager (1999 - 2003)Crew Member (1997 - 1999)

As a Shift Running Floor Manager I was responsible for managing shifts in a store with a turnover in excess of half a million pounds a year. My duties included personnel management and training, Health and Safety compliance, inventory control and ordering, first aid, customer service and complaint resolution, and continued part time alongside my university studies.

#### **Education**

## **Edinburgh Napier University**

(2004 - 2010)

Bachelor of Engineering with First Class Honours in Computer Networks and Distributed Systems (Sandwich)

#### Topics included:

- Java programming
- Embedded systems (Java and C)
- SQL queries and database normalisation
- Linux system administration
- Web development with PHP and MySQL
- Web services
- Distributed systems
- Wireless networking
- Computer forensics and encryption
- System administration and security

My Honours project involved implementing a lightweight networking protocol for embedded 802.15.4 wireless devices. The course also involved a year's placement in industry.

### **Daniel Stewart's and Melville College**

Higher

Physics: A, Chemistry: A, Mathematics: A, Computing: B, English: C

Certificate of Sixth Year Studies

General Mathematics: A, Pure Mathematics: B, Chemistry: B

#### **Personal**

Along with some other graduates from my university course, I run and administer a co-located Linux server which we have used to gain experience in implementing offsite backup scripts, SQL databases, websites, an email system including webmail, spam filtering and server-side mail rules, DNS, VPN, and firewall services. Challenges overcome include a total disk failure (fortunately after we had implemented offsite backups), datacentre migration and several severe denial of service attacks. This server runs many small personal websites as well as the forum and game servers for a small multiplayer gaming community.

I have experience with Python, Java, PHP, C and ASP Classic programming and am currently teaching myself .NET web programming. I am also experienced with DOS and bash shell scripting and have a basic familiarity with PowerShell. As part of administering a server for the popular multiplayer game Minecraft I have become involved in maintaining third-party player auditing software used by over 2,500 servers with a peak player count of over 12,000, and have contributed a number of improvements including refactoring the database queue system to provide a 250-times increase in database performance as well as many other smaller increases in stability and performance.

I have a small home network which includes a Windows Active Directory server as well as a Linux server which acts as a fileserver for the Windows computers using Kerberos, as well as a Virtual Machine host.