

# David Trail

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EH11 1HB      *DoB:* 8th of January 1990

INTERESTS      I have a very strong interest in programming, security and networking. My primary language is Python which I've become an expert in over the past 5+ years with daily usage of the language (including more advanced areas such as `asyncio`). I'm a Linux user at heart, I live life on the command line and love open source software. I have demonstrable skill not just with Linux on the desktop but within server/cloud environments – including networking, AWS, firewalls and virtual machines.

EDUCATION      Computer Science BSc, **Heriot-Watt University**  
*September 2007 to May 2011*

2 <sup>nd</sup> year	3 <sup>rd</sup> year	4 <sup>th</sup> year
Database Management	Artificial Intelligence	Distributed Systems
Discreet Mathematics	Operating Systems	Parallel Technologies
Formal Specifications	Concurrency	Biological computation

My 4th year project was a C++ program that hooked a D3D9 Direct X process and recorded its output to a video file. Project fully managed by myself including planning, design, implementation, testing, user feedback and documentation.

CAREER      **Freelancer**, Edinburgh

## **Contract, freelance & side projects**

*September 2014 onwards*

- I work for many clients, often troubleshooting their server or EC2 instance. Very varied work, from configuring nginx to sorting out iptables to deploying OpenVPN securely
- Use of nmap/wireshark/metasploit for network diagnosis and pentesting
- Experimenting with complex local networking amongst VMs running various distributions, using configuration management (Puppet) and more

**Escuela de Idiomas**, Salamanca, Spain

## **Learning Spanish & code projects**

*July 2013 to September 2014* (1 year 2 months)

- Learned Spanish from nothing to B1 proficiency
- Kept up to date with my coding, some of which can be found on [Github](#) or [Bitbucket](#)

- I ran a dedicated server which was leased out to various clients. I set up the VMs with Qemu, managed the networking and many of the clients' services

**Scotweb**, Edinburgh

**Software Engineer**

*June 2011 to July 2013 (2 years 1 month)*

- A lot of Python (with Twisted/Django). Also Perl, Bash and C
- Extensive use of Javascript with jQuery/ajax and its intercommunication with the Python server
- Administration of all the Linux/Mac machines
- Documentation, planning, feedback gathering and iterative design methodologies
- HTML5 and CSS3
- Caching and load balancing
- PostgreSQL query optimization and schema design