

Pierre Ciholas

Cybersecurity specialist

Network & system administrator

Experience - (10+ years)

PhD researcher, research & teaching assistant

Lancaster University - Current activity from July 2015 (expected completion: end of 2019)

Currently working as PhD candidate researcher in cyber security. My research objective is to further the understanding of combinations of individual vulnerabilities on systems, and design tools to analyse then secure them. I gave a special attention to Cyber Physical Systems (CPS). CPS examples include industrial control systems, telecommunications, the smart grid, and many others systems part of the critical national infrastructure. I have also researched in the area of software and operating system security and discovered then responsibly disclosed several vulnerabilities, including a critical 0-day for Microsoft Windows.

Software developer, network & system administrator

FlyZone, Indoor SkyDiving – December 2011 to May 2013 (1 year, 6 months)

Developed the full structure's management application combining numerous programming languages. From the ticketing and booking system, management tools for the company's team to the application controlling the different physical elements operated by my own programmable logic controller such as cameras, camcorder or lights.

Administrator of internal and external networks and systems, also responsible of their security.

This ambitious project made is to me a successful technical and personal challenge.

Network & system administrator

Ataraxie, Data centre – August 2007 to December 2011 (4 years, 5 months)

Responsible of the networks and systems as well as the physical aspect of the data centres. I was given autonomy to experiment and gain experience on the following technologies amongst many others:

Web services administration (mails, DNS, HTTP(S), FTP, SSL, databases, proprietary solutions ...)

Virtualisation solutions administration (VMWare, Virtuozzo, Xen ...)

Operating systems administration (Windows servers, various Linux distributions, BSD, proprietary systems ...)

Benchmark and customisation of solutions (Linux kernel, Apache, Nginx, Pg/MySQL ...)

Administration of specialised equipment (routers, switches, APU, KVM ...)

Security solutions (firewall, firewall-bridges, antivirus, antispam, various types of VPN, distributed backups ...)

Client and partners assistance by remote control, telephone or interventions

Development and scripting in numerous programming languages

This project is a milestone in my career and my personal development. It allowed me to take on ambitious challenges requiring the development of new sets of skills every time. It amplified my thirst for new challenges even more.

Cybercafé supervisor, network & system administrator

Cybercafé Le QG – August 2006 to August 2007 (1 year, 1 month)

This was my first professional experience which catalysed my enthusiasm to be an IT professional.

On the technical side, it allowed me to be responsible of my first network. This network, even if of modest size, taught me how to plan operations and use specialised tools for tasks such as maintenance, monitoring, or automation.

Freelance worker and IT blogger

Freelance worker since 2008 – IT blogger since 2003

Moderator and file analyser for the online game hacking community UnknownCheats.

I work as freelance worker on various projects from websites and online shop creation to photography or video montage.

During several years of my adolescence, I had a website to publish my IT and hacking related articles and video guides with a strong community following me.

Education & training

PhD candidate (awarded full scholarship following MSc)

Lancaster University, United Kingdom

Notable events: 2 publications in top academic venues (Computers, SERECIN), 3 more publications in final stages or under review (CCS, Usenix), won the poster competition at IAAC conference, awarded £10k grant to build a building management system testbed.

Additional activities: Teaching, hacking competitions, volunteering for college and university events.

MSc Cybersecurity (with Distinction)

Lancaster University, United Kingdom

Modules: Information system security management, system penetration and countermeasures, forensic investigation, risk management, network and systems security, cybercrime, introduction to law, ethics and conflict in the digital age, and dissertation.

BSc (hons) in networking, wireless, and security

Toulouse-le-Mirail (Toulouse II) University, France (French « Licence RSFS : Réseaux, Sans-Fil & Sécurité »)

Modules: Network architecture and interconnection, system administration, databases, security and access control, hardware and software security, security audit, cryptography and authentication, interpersonal communication, project management, and IT laws.

HND in computing, networking, and management

CFA Blagnac, France (French « Brevet de Technicien Supérieur en Informatique de Gestion »)

A-levels in IT, computer networking, and telecommunications

CFAI Languedoc-Roussillon, France (French « Baccalauréat MRIM : Micro-informatique, Réseaux, Installation & Maintenance »)

GCSE in electrical and electronic engineering

CFAI Languedoc-Roussillon, France (French « Brevet d'Etudes Professionnelle en électronique »)

CCNA1 certification (Cisco Certified Network Administrator)

Other skills

Examples of IT related competences

Cybersecurity (assessment, operations, procedures, best practices, policies ...)

IT Security (firewalls, monitoring, VPN IPSec/SSL, VLAN, backups systems, advanced monitoring solutions...)

Network administration (WAN, LAN, xDSL, Ehternet, IP, NAT, VRRP, BGP ...)

System administration (Windows server, Linux distributions, BSD, proprietary systems ...)

IT Services administration (servers DNS, HTTP(S), FTP, SSL, mails, Exchange ...)

Development & web development skills (PHP, ASP, C, C++, Python, Perl, Java, standard HTML, CSS, AJAX ...)

Database installation and management (MySQL, PostgreSQL, LDAP directories ...)

Full websites & shops creation, with CMS such as Wordpress, Prestashop, or Magento, and adaptation if required

Being an organised fast learner with an enthusiastic and positive approach facing new challenges, I will autonomously and independently develop the required techniques to successfully achieve my projects meeting tight deadlines.

"If there is a problem, I will be part of the solution."

Languages

French - Native

English - Bilingual proficiency

Spanish - Limited working proficiency

Contact & additional information

Email: pierre@ciholas.fr / p.ciholas@lancaster.ac.uk

Phone: +44 (0)7412 746161 / +33 (0)6 77 67 80 60 / Skype ID: pierre.ciholas

Address: Lancaster University, Infolab21, Office B55, Lancaster, Lancashire, LA1 4WA, UNITED KINGDOM

Website & social networks: www.ciholas.fr, LinkedIn, Facebook, Twitter, Google+

Spare-time activities (outdoors): Long-distances running, cycling, hiking, photography, skydiving, and motorcycling.

Spare-time activities (indoors): Learning, vulnerability research, game hacking, programming, and reading.