

Luke Skarth-Hayley

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Profile

With nearly a decade of experience in IT and having obtained a MSc Computer Science with Distinction from the University of Nottingham in 2017, I am a creative and organised software developer and researcher with interdisciplinary interests and skills. Most recently I have been working as a visiting lecturer at Nottingham Trent University, teaching Computer Science and Product Design students at undergraduate and postgraduate level, with a focus on programming in C++, relational databases (SQL) and Internet of Things design using Arduino and Raspberry Pi systems.

Current personal projects include work with a Python-based static website generator, and improving my knowledge in C# and C++ for dynamic web and desktop applications and games, along with an initial foray into Vue.js.

Experience

Jan 2018 – Present **Nottingham Trent University – Visiting Lecturer / Research Associate**

In November 2017 I delivered two lectures to undergraduate students on the Product Design courses at NTU, detailing a brief history of computing and its relevance to them, and covering mixed reality technologies with a focus on ubiquitous computing / Internet of Things and how the students might integrate these concepts into their designs. From these lectures I was then asked back to teach undergraduate students in labs, seminars and workshops in Programming in C++, Systems Analysis & Design, and Design Studies (teaching research methods and user-focused design approaches) for the Computer Science and Product Design departments.

Presently I am planning to deliver a series of workshops for postgraduate students in Product Design on both dissertation writing and programming with a focus on IoT and ubiquitous computing, and am also working as a research associate, rewriting complex academic papers into executive summaries, reports and other materials to provide to local and national governmental organisations, social enterprises and the public.

Oct – Dec 2017 **Games Workshop – Web Store Developer**

Achievements: Solved application errors caused by bots crawling non-direct access directories by editing robots.txt to restrict crawler access, significantly reducing errors and false positives. Built an Ansible-based deployment solution to automate local developer machine builds. Learned Test-Driven Development (TDD) fundamentals, worked in an Agile team, and learned the essentials of Java and Groovy, along with JSON-based client-side rendering of content via JavaScript.

Sep 2016 – Oct 2017 **University of Nottingham – MSc Computer Science Student**

Modules: Programming in Python | Databases, Interfaces & Software Design Principles | Systems & Networks | Mixed Reality Technologies | Games | Research Methods | Dissertation: Network Traffic & Intrusion Sonification

I studied the MSc to convert across from IT to Software Development. Having learning scripting languages in my IT roles I taught myself the basics of Python prior to my studies. The course enhanced my programming knowledge in Python and other languages, and taught me key aspects of software design, implementation, and maintenance, as well as increasing my academic and theoretical knowledge of the discipline. I was also a member of CompSoc and HackSoc, taking part in various tutorials and hackathons.

In the autumn semester I created an endless runner game in Python, built a database-backed web application in PHP and MySQL and wrote a critical analysis of mitigating DDoS attacks. In the spring semester I created a locative experience prototype that utilised a JavaScript-based portal to track user progress, built an IoT project using Python, a Raspberry Pi and GrovePi sensors, and created a prototype game in Unreal Engine. I received a high distinction and average grade of 83%, gaining a grade of 85% for my dissertation on network sonification, analysing network data through packet capture and analysis and converting data points into audio as a form of early warning system for attacks, as well as a general network health monitor.

Sep 2014 – Sep 2016 Exco InTouch Ltd – IT Systems Engineer

Achievements: Windows 10 corporate customisation and rollout, including OS Deployment Automation. Head Office Server Virtualisation and server room and networking reorganisation. Deployed Bitlocker Encryption of all laptops using MDOP MBAM. Implemented ITIL-based service desk software, CMDB and asset naming scheme to track IT assets. Instigated cloud-first approach to corporate IT. Scripted user-account creation and deletion with PowerShell, inclusive of user groups, hybrid account management and license assignment. General automation.

2013 – 2014 Ministry of Defence – Technical Support & Solutions

Achievements: Created a highly secure air-gapped deployment system using MDT and AIK, producing security-enhanced Windows 7 images to upgrade over 300 laptops and desktops. Supported over 200 iPads via Symantec MDM solution. Maintained and upgraded a media service Apple Mac network. Scripted and automated recurring support tasks including software and database updates in Windows and Linux.

2010 – 2013 Hewlett Packard Enterprise Services – Service Desk Manager -> 3rd Line Support

Achievements: Reduced Service Desk backlog of over 600 tickets to under 50 in three months, met and exceeded SLAs and brought all KPIs into the green, overhauled departmental processes to minimise bureaucracy and enhance efficiency whilst ensuring required records and documentation were kept. Produced an intranet IT support site in XHTML, CSS, JQuery and PHP to provide FAQs and a standardised fault submission form to customers. Supported over 6000 PCs countrywide, inclusive of security patching, antivirus management and software deployment. Assisted in migration of users to new DII F network, and decommissioned old network and hardware.

2008 – 2010 Ministry of Defence – Service Desk Technician

2007 – 2008 F1 Help Ltd – IT Administrator & Workshop Manager

Education

2016 – 2017 University of Nottingham – MSc Computer Science
Grade: Pass with Distinction (70%+) with an average grade of 83%.

2014 AXELOS & PeopleCert – ITIL V3 Foundation

2009 CompTIA – Network+ Qualification & A+ Training

2003 – 2006 University of East Anglia – BA (Hons) Philosophy
Grade: 2:1

1997 – 2003 Carre’s Grammar School & Sleaford Joint Sixth Form – A-Levels
Grades: English (A), Electronics (A), General Studies (B), Biology (C), Psychology (C)

Technical Skills

Software	Python, C++, C#, Unreal Engine, JavaScript, Node.js, MySQL, MS SQL, HTML, SASS, CSS, Java, Groovy, PowerShell, Batch Scripting, Bash Scripting, Unit Testing, Test-Driven Development, Jira, Github.
Systems	Ansible, Microsoft Azure, Office 365, Active Directory, MDT, Microsoft Intune, Hyper-V, Virtualisation, Windows 7/8.1/10, Windows Server 2012 R2, IIS Server, Microsoft SQL Server, BitLocker / MBAM, UNIX, Linux, Debian, CentOS, Fedora, Apache, Nginx.

Additional Information

Additional Skills Research – commercial and academic.
Presenting – delivering lectures, labs, seminars and workshops to a range of audiences.
Writing – fiction and non-fiction.
Voicework. Audio editing. Video editing.

Driving License Full, Clean.

Security Clearance Previously held UK SC Clearance during MOD & HP employment