Mark Honeychurch

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Background

The last twelve years have been spent working for an Australian company, Interactive, both as a hardware support engineer and a fullstack software developer. Prior to that I worked as a systems support engineer. Interactive have decided to close their Wellington office, therefore I am looking for a full-time permanent or contract role, working in development or support.

Competencies

- Critical thinker - Able to critically analyse ideas and offer constructive criticisms.
- Creative problem solver - Enjoy being given challenging tasks, and will come up with novel but practical solutions to complex problems.
- Keen and quick learner - Can research topics and synthesise new

information quickly. Enjoy using new technologies, and always seek to know more.
- Methodical worker - Able to see projects through design and implementation to completion, and happy working to deadlines.
- Capable communicator - Comfortable building and maintaining relationships with both internal and external stakeholders.

Technical Skills

- Wide experience and knowledge of operating systems, software and hardware.
- Certified on both Windows and Linux
- Experience with cloud services and container based virtualisation.
- Coded solutions in PHP and Python, but in recent years have been developing JavaScript software using Node.js.
- Experienced using libraries such as Express, Socket.IO, Axios, Vue, NuxtJS and VuePress.
- Can use both SQL and NoSQL databases (MS SQL, MySQL/MariaDB, MongoDB)
- Knowledgeable in HTML5 and CSS3, along with several popular HTML/CSS frameworks (including Bootstrap and Material).
- Experience supporting server, network and storage hardware.
- Competent in data processing and analysis, and where possible use my programming knowledge to create reusable data analysis tools.

Education

I have a Master's degree in Engineering, and hold a variety of professional certifications relevant to my career in IT.

Certifications

Cert	Details
LPIC	LPI Linux Levels 1 & 2 Certified
UCP	Ubuntu Certified Professional
ITIL	ITIL Foundation Certified
MCP	Microsoft Certified Professional - Windows & Clustering
MCITP	Microsoft Certified Information Technology Professional
MCTS	Microsoft Certified Technical Specialist - MS SQL
W3C HTML	W3C Certified HTML Developer
ASAP	NetApp Accredited Storage Architect Professional
NCDA	NetApp Certified Data Management Administrator

Degree: M.Eng (Hons)

University of Bristol Master's Degree with Honours in Mechanical Engineering (1994 - 1998)

Chess Playing Robot. In the third year, I completed my thesis on a chess-playing robot. This involved extensive programming in Borland Delphi, as well as VAL, a language used to control the PUMA 450 robot arm. During the project I had to work with a CCD camera and video capture software/hardware.

FEA Software. My fourth year thesis was on the writing of a Finite Element Analysis package for use within the University. It primarily involved programming in Borland C++ Builder, although parts of a previous year’s program in Visual C++ were also integrated.

Work Experience

Software Developer

Telesmart *Wellington, NZ* (2019-10 –)

At Telesmart I develop software products for both in-house and customer consumption, using modern tooling and libraries to deliver high quality solutions.

Projects

Customer Portal. I designed and developed a Customer Portal utilising a NuxtJS and Vuetify frontend, with secure authorisation using JSON Web Tokens. The backend infrastructure consists of a set of Federated Apollo GraphQL Microservices, with PassportJS and third party OAuth authentication strategies. Lerna is used for monorepo management, along with MongoDB and Redis for data storage. All The code is deployed to virtualisation containers hosted on a Docker Swarm, using an automated build pipeline. All together, the project contains 11 scalable microservices and 14 custom written private Node modules.

Hardware Engineer, Software Engineer

Interactive *Wellington, NZ* (2007-10 – 2019-10)

My primary role at Interactive was in hardware support, providing a first class service to our New Zealand customers. I covered HP, IBM, Dell and Sun servers, as well as Cisco networking equipment and NetApp and PureStorage storage hardware. I installed and supported hardware for many major customers across New Zealand.

During my time at Interactive I also created several software products for in-house consumption:

Projects

Business Analysis. I created a dashboard for management allowing a view of the utilisation of all our field engineers. This was accomplished with direct SQL querying of our helpdesk system's database, along with a web-based front end using jQuery, Bootstrap and the D3 graphing library.

Rostering Website. I developed a complex web-based scheduling system for Interactive's on-call rosters, using Javascript, Moment, Vuetify, the Vue CLI tool and C#.

Tracking System. I created an end-to-end tracking software solution for our engineers, including an iOS app for interfacing with a ticketing system and reporting geolocation, a Node.JS and Mongo backend for data storage, and a Vue frontend with websockets for displaying realtime engineer locations and statuses, using Docker on Linux as a platform.

Rapid Development I was asked to develop a simple customer portal in 24 hours that would allow one of our customers to access details of their support contract with us. Using Vue and Bootstrap, and accessing existing data in multiple Microsoft SQL databases, I was able to code a secure, modern, responsive website that worked for all of our customers in less than a day.

Systems Engineer, Server Team Lead

gen-i *Wellington, NZ* (2006-04 – 2007-10)

When I started with gen-i, I provided 2nd and 3rd level support for the ANZ National Bank throughout New Zealand. This support involved both completing work requests and fault fixing. Work requests included maintaining the Active Directory environment, providing network shares, building PCs and installing software. Fault fixing covered the whole range of the bank's IT hardware and software, with the hardware mainly consisting of Compaq/HP and Dell servers, PCs and Laptops, and software running to hundreds of packages. Issues dealt with ranged from dial-up and broadband problems, through OS and application faults to Exchange and Active Directory problems.

After several months in the role, I became Technical Lead of gen-i's ANZ Server Support team, looking after all ANZ and NBNZ production servers. This involved a mixture of projects and day-to-day administration of branch and corporate servers, including backups, hardware and software problems and routine maintenance. Faults were fixed within SLA and, in alignment with ITIL best practice, problem records were created and root causes diagnosed and repaired. Incidents ranged from the relatively simple, such as hardware failures, to the complex, such as troubleshooting NDMP backup problems.

As well as supporting the environment, I supported the other server engineers on the contract – helping with technical issues, running weekly meetings and distributing work when required. I encouraged engineers to gain qualifications and aided them where possible.

Projects

RightFax Upgrade. I ran a project to migrate existing RightFax users to a new infrastructure. This process involved the building of new RightFax servers, installation of Microsoft SQL clusters (including setup of SAN disks) in both Production and DR environments and the subsequent migration of Fax mailboxes between servers.

Technician

Department of Internal Affairs *Wellington, NZ* (2005-11 - 2006-04)

At the DIA I supported over 1,000 users in an Active Directory and Lotus Notes environment, both for the Department of Internal Affairs and the Ministry of Transport. Support was given over the telephone Nationwide, and additionally with site visits within the Wellington CBD area. PCs were generally Windows 2000, with some remote clients using Citrix, and the hardware used was mainly HP/Compaq Desktops and HP and Ricoh Printers. Supported applications included Microsoft Office, Oracle and Lotus Notes, with Checkpoint VPN-1 and iPass used for remote access.

Director

Spiral Technology *London, England* (2003-03 - 2004-11)

During my four years in London a business partner and I set up a company specialising in supplying cost effective IT solutions using mainly Open Source components. Through this work I have a solid understanding of Linux and Content Management Systems, eCommerce Solutions, Photo Galleries and other applications.

I have also been involved in the costing of contracts, responding to tenders, filing of tax returns and many other facets of running a company. I have liaised with customers throughout the life-cycle of delivering a product – both third-party and bespoke – from initial specification to deployment and beyond.

Projects

Firewall Deployment. Installation of an OpenBSD Firewall and OpenBSD Web Server with secure authentication for Johnson Matthey, a major chemicals company. The install included an Intrusion Detection System with a web-based front end.

CMS Redesign. Redesign of a bespoke CMS for IPPR, the (British) Labour Party's top think tank.

CMS Rollout. Rapid (< 24 hours) installation of a hurricane disaster relief information site for The Cayman Islands' Government, using the Mambo Open Source CMS (now Joomla) and several add-on modules.

Support Analyst

St Mungo Association *London, England* (2004-02 - 2004-10)

At St Mungo's, London's largest charity for homeless people, I worked in an Infrastructure Support role. This involved a lot of network troubleshooting, as the organisation consisted of over 50 remote sites all connecting to the Head Office using VPN through ADSL. Problems were fixed using NetSupport, a remote desktop solution, where possible. I also resolved many networking issues, both LAN and WAN and helped to configure the Debian based firewalls at each site.

I wrote several pieces of in-house documentation for general staff covering topics such as viruses, spyware, network shares and advanced Outlook use. I commissioned several new office sites, involving the installation and configuration of all networking equipment, PCs, servers and printers.

Projects

Automated Desktop Builds. I conceived of and ran a major project to automate the Windows 2000 install, as most desktop hardware within the organisation was one of five models of PC. I created a fully automated install of Windows, using a choice of either CDs or a network share as the source media. The install scripts configured networking and other custom options for Windows and installed all applications required by staff, such as Acrobat reader, Microsoft Office and several bespoke applications.

Network Analyst

Icarus Computer Systems *London, England* (2002-05 - 2003-12)

During my time working for Icarus, I mainly supported the London Borough of Waltham Forest's Lifelong Learning department.

At the Lifelong Learning Department of LBWF Council, I oversaw the IT department, resolving desktop and server related problems for 500 users both over the phone and through site visits, and by delegating tasks to other IT staff members. I administered the main Server room, looking after approximately 20 servers ranging from Citrix servers (A CD-ROM application server and a Leisure Centre application server) and other Windows based servers to the Solaris-based library catalogue system and a Netware GroupWise server.

I was occasionally seconded to Edmonton Green College, where I administered a network of approximately 120 PCs, supporting all hardware and software including NT user accounts, MS Office, printers and networking.

Projects

SOE Desktop. I created a standard desktop environment for secure public access terminals, and helped to install desktops in all public libraries.

Firewall Install. When a new fibre connection was ordered I custom-built an OpenBSD firewall to protect the network, and configured a secure ruleset and bandwidth throttling. A DMZ was created and all public-facing servers were moved into the DMZ.

Intranet Build. To provide an Intranet site, I built an Apache web server on Windows 2000. I also installed a php-based forum for use by staff and integrated it into the Intranet site. Later I built a Mandrake Linux server running Apache 2, for hosting of an Internet site. I assisted with website design, using CSS and standards compliant XHTML in order to ensure that our web presence was in line with UK e-Government standards. I also installed a logfile analysis package to give staff access to metrics on website usage by the public.

Proxy Install. I installed a Mandrake-based Squid proxy server, and configured it to allow different levels of filtering for staff and public. This also allowed measurement of bandwidth use of our fibre link.

Helpdesk System. I installed a FreeBSD server with a web-based helpdesk application and used this to run the helpdesk, tracking all calls and delegating them to staff members' helpdesk accounts.

Library Catalog. I installed and configured a Java-based application to provide an online access Library Catalogue, and edited the source code to integrate the visual style of the website with the existing corporate style.

Public Directory. Similarly to the Library Catalogue project, I installed an XML-based public resources database with web front-end and edited the code to integrate it visually with the rest of LBWF's web applications.

Installations Engineer

UBS Warburg *London, England* (2000-11 - 2001-05)

As a member of the trading floor desktop installations team, my primary role was the building, installation and support of Windows NT4 and Windows 2000 Workstations and Laptops. We supported several hundred traders and support staff, who would typically have several workstations each, including a primary NT4 workstation with quad-head display and dedicated Bloomberg, NeXT and Sun machines, along with 7 or 8 flat screen displays. I also installed and configured Weytech keyboards which allowed control of up to 6 workstations, as well as enabling workstation sharing, control of multiple screen switches, keyboard emulation (PC, Sun, Bloomberg, etc.) and key-press macro recording. The position also involved network troubleshooting, email support (Outlook and CCMail) and administration of NT user and resource domains.

Network Analyst

St. George Bank *Sydney, Australia* (1999-04 - 1999-11)

My role at St. George was providing third level support for the Client Server Technical Systems (CSTS) Department. As such I was part of a team delivering support to the Core Network File Servers and associated software using Novell Netware servers and Novell Directory Services. This support was both for the Kogarah Head Office (2500 users), and a distributed branch infrastructure across Queensland, New South Wales, Victoria and South Australia (8000 users).

On top of this support I administered the ISYS helpdesk system, a database of helpdesk calls. Problems relevant to the team were either resolved by myself or delegated by me to another member of the team. This provided work on a wide range of problems throughout the bank. Frequent problems included IP conflict troubleshooting, restoring of data from ARCserve and ADSM backups and fixing printer problems.

Projects

Automation. Having found that several batch files and other scripts were being run to copy files cross the network, I created a program in Delphi to allow automated file distribution over the LAN. The program allowed the user

to create multiple jobs and specify which files to copy, where from/to and when/how often.

Ebank Rollout. St. George's new Electronic Banking system (EBank) occasionally had IP-related problems with client networks, which I was tasked with troubleshooting. I designed and built a test network to help pinpoint potential problems, and then helped to write a questionnaire designed to discover which clients would most likely encounter problems. After talking to clients' IT personnel on the phone to build a clear picture of how their network was set up, I would advise the installation team on any special installation requirements. If an installation still had problems, I would personally visit the client site and troubleshoot their network in order to resolve the conflict.

Systems Administrator

Rail Services Australia *Sydney, Australia* (1999-01 - 1999-04)

During my first contract with RSA I was responsible for the migration from WFW 3.11 to NT 4.0 at a range of sites in and around Sydney.
My second contract involved the administration of RSA's New South Wales NT network. This included creating and administering user accounts and Microsoft Exchange mailboxes for employees, looking after the ARCserve backups on a day-to-day basis and writing Kixtart logon scripts to set up user profiles, registry settings and desktops, and map network drives.

Officer, 2nd Lieutenant

HM Armed Forces *Surrey, England* (1994-09 - 1998-02)

Whilst serving my commission I was tasked with training potential Officers at the UOTC, as well as taking time off from my studies to work with the army on attachments to my Regiment in both England and Germany.

Voluntary Work

I have dedicated much of my spare time to working for charities, and have held the following positions:

- Chair of the NZ Skeptics
- Secretary of the Society for Science Based Healthcare
- President of the Humanist Society
- Council Member of the NZARH
- Media Spokesperson for the Secular Education Network
- Treasurer of Making Sense of Fluoride
- Co-founder of CoderDojo New Zealand

These roles have involved people management, strategic planning, meeting statutory reporting requirements, overseeing projects, organising events, managing IT systems and protecting the public. As part of my voluntary work I have regularly talked with the media (newspapers, radio and TV), and from 2015 to 2018 I appeared on a regular radio segment on RadioLive called Skeptical Thoughts with Mark Honeychurch, where I talked about scientific skepticism and critical thinking.

Referees

Available on request, along with certification transcripts if required.