# **Matthew Russell**

An educated and experienced systems and software engineer interested in technical work that is engaging and rewarding. I have a broad set of skills and experience with a deep understanding of software development and the computer systems that they're founded on. A personable and clear communicator who collaborates and works well in teams. Capable of managing projects and completing tasks independently to deliver results.

#### **EDUCATION**

## **Bachelor of Information Technology**, Griffith University

2012

Major in IT Marketing & Management

### **Technical competencies**

- Object-oriented programming, data structures, algorithms, and discrete mathematics
- Computer science, network engineering, and cybersecurity
- Systems analysis and design, database design and administration, information systems
- Web development and user experience design

### **Business competencies**

- Project management, agile methodologies and the software development lifecycle
- Business analysis and process design, quality management
- Organisational and management strategy, decision making
- Ethics and professional IT issues

## **SKILLS & ATTRIBUTES**

### Software Development

- Strong programming ability with knowledge in data structures, algorithms, and Object-Oriented Programming. Experienced in JavaScript/TypeScript, Bash, and SQL, with some experience in Rust, Python, PowerShell, Java, C, Objective C and C++
- Experienced fullstack web developer with knowledge of JavaScript, TypeScript, frameworks such as Vue, Angular, and React. Good knowledge of HTTP requests and APIs, deploying websites, servers, firewalls, databases, and other services/APIs
- Competent using Git and repositories such as GitHub and GitLab for code version control including cloning repositories, committing regularly with clear descriptions, branching, merging, and pull requests

## Systems Engineering and Scripting

- Strong terminal and Linux experience. Scripting and automation using Bash and PowerShell including managing and monitoring hosts and services
- Systems administrator experienced in managing VMs, HyperVisors, and physical servers and applying least privilege principle to service accounts and file permissions

### **Projects and Project Management**

- Completed many web development projects from custom web stores to backend portals, tooling, and automation for businesses. Requirements gathering, application design, agile development process, deployment and security hardening, code handover, and maintenance including bug fixing and implementing additional features
- Managed several server refresh projects to replace hardware and upgrade virtual servers. Hardware
  refresh included design and validation of the new systems, procurement, installation, and
  decommissioning of old equipment replacing many chassis, blades, rackmounts, and switches.
  Upgraded over 50 virtual servers and 10 applications to new OS/application versions and associated
  web, database, and application servers

#### **EMPLOYMENT HISTORY**

## **Software Engineer**, Pxel

August 2021 - Present

Developing dynamic web applications and responsible for the lifecycle of the application from agile development, managing deployments, servers, APIs, and services through to testing, CI/CD, and monitoring. For a full list of my projects and links where available please check out the projects page on my site at mjrussell.net.

#### **Roles and Duties**

- Developing web applications using JavaScript/TypeScript on frameworks including Vue3, Nuxt3, and React. Dynamic pages using data from content management systems such as WordPress, Shopify/Sanity, and Directus accessed via REST APIs and GraphQL
- Deploying sites using static site generation and server side rendering on Cloud services including AWS,
   Azure, CloudFlare, Netlify, and Dockerised deployments. Using CI/CD tools to integrate testing, automate builds on branch commits, and generate preview links from pull requests
- Standing up servers and services in the Cloud such as EC2s for hosting applications, S3 buckets for application data, SQL databases, API proxies, and CDNs

### **Outcomes and Achievements**

• Successfully built and deployed over 10 web applications with many complex custom features, reliable uptime and stability, and customisable for the user from their CMS

#### **Projects**

- WLTH Banking portal for WLTH customers to view account balances, transactions, interest rates, reward points, and other financial information as well as manage their customer details and preferences. Built with Nuxt and TypeScript, security hardened, Okta authentication, and integrated WLTH's APIs with secure API gateways.
- Pricing Tool Internal tool that allows the client to match their Shopify products against pricing data scraped from various public sources using Puppeteer and APIs to inform pricing decisions. Built with Nuxt, Shopify, Directus, Puppeteer, and WebSockets
- EverVessel Web store with the front end built using React and Sanity APIs for the back end, custom components to allow users to enter text and images for laser engravings
- Tax Builder Nuxt app that takes property inspection data for tax purposes, parses the data for assets into a table, allows the user to enter values and make changes, then the app automatically calculates and generates various tax deprecation schedules over 40 years as well as exporting the tables as a CSV so that they can be copied into reports

## Social Analytics Lab Coordinator, Griffith University

July 2019 - December 2024

Managed the Social Analytics Lab at Griffith University, a research lab that stored, managed, and analysed administrative data for social science research.

### **Roles and Duties**

- Compiling data from datasets for research projects using SQL and GIS tools, and updating datasets from data custodians
- Managing project administration including applications, approvals from custodians and committees, and reporting on project updates and outcomes
- Managing users including their application, induction, keys and swipe cards, physical and computer access

## **Outcomes and Achievements**

 Grew the lab to over 80 researchers working across 50 research projects from 3 data sources to produce over 100 outputs including journal publications, manuscripts, reports, and conference presentations

## Systems Engineer, Griffith University

March 2018 - July 2019

Responsible for the delivery of the Server Refresh Project to upgrade out of warranty physical server hardware and upgrade unsupported Windows Server OS versions.

#### **Roles and Duties**

- Maintaining and installing physical server hardware, including Dell M1000e chassis, Dell M-series blades, and Dell R-series servers, working with hardware vendors to extend warranty support and repair hardware
- Designing and quoting server hardware solutions to meet operational, project, and application requirements
- Deploying and configuring Windows Server OSes and configuring applications to comply with the Solution Architecture and security hardening

#### **Outcomes and Achievements**

- Successfully delivered Server Refresh Project 2018: Install and configure Dell M1000e chassis and Dell M640 blades, upgrade or decommission over 50 Windows 2008 R2 servers and 10 applications
- Received Sustained Performance Award from the Director of IT Infrastructure

## Senior Systems Administrator, Griffith University

Nov 2016 - Mar 2018

Support of nearly one thousand Windows VM servers across two Data Centres at Griffith University.

#### **Roles and Duties**

- Diagnosing and resolving issues with Windows servers such as performance, disk capacity, access, firewall, and VMware host contention
- On-call responsibility for diagnosing and resolving server incidents as well as successful participation as primary contact for Disaster Recovery simulation event
- Provisioning and managing VMware VM's including deployment, snapshots, disk management and hardware rightsizing, migrating hosts and managing performance
- Managing Windows domains, AD accounts and groups, access to servers and network shares

### **Outcomes and Achievements**

- Completed a project to automate 90% of manual operational tasks through process changes and PowerShell scripts
- Awarded System Administrator of the Month as nominated by colleagues
- Awarded for maintaining a high rate of service desk tickets resolved
- Continued feedback for high-levels of client satisfaction

## **Computing Support Officer**, Griffith University

**Jul 2012 - Nov 2016** 

IT support of a fleet of nearly 5000 staff machines at Griffith University from a wide range of vendors, configurations, software, and peripherals.

## **Roles and Duties**

- Responsible for managing the lifecycle of machines from various vendors such as Dell, HP, and Apple
  and included quoting, procurement, setup, installation and migration of user data and software, support
  and warranty, and asset disposal
- Managed Windows, macOS and Linux machines with a multitude of software packages and peripheral devices. Includes BYOD devices such as iOS and Android phones and tables
- Diagnose and resolve complex technical issues across a wide variety of software and hardware
- Excellent client service and communication while managing work based on ITIL principles

#### **Outcomes and Achievements**

 Development and support of Griffith University Red Zone, an innovative technology space that used large tiled screens with meshed display, convoluted projectors onto a curved surface, and interactive topology projection using silicone sand

## Audiovisual Support Attendant, Griffith University

Dec 2011 - Jun 2012

Support of AV equipment and spaces including Lecture Theatres, Seminar Rooms, Video Conferences, Teaching Laboratories, and Events across Griffith University.

#### **Roles and Duties**

- Support of Griffith AV spaces; Lecture Theatres, Seminar Rooms, Video Conferences, Teaching Laboratories, Events
- Support of AV equipment; Projectors, Lecture Capture/Echo 360, AMX touch panels and control panels, touch screens, Cisco control panels, Cisco Video Conference Televisions, Public Address systems, mixers, microphones and video cameras.
- Supporting a wide range of clients from students to executives while while working within a team and independently, including on-call out of hours

### **Outcomes and Achievements**

- Received Outstanding Client Service award
- Team was nominated for Outstanding Client Service award

## Computer Laboratory Attendant, Griffith University

Nov 2009 - Nov 2011

Support of hardware and software for student, common use, and teaching computer laboratories across multiple campuses at Griffith University.

#### **Roles and Duties**

- Supported student, common use and teaching computer laboratories
- Audit, clean, maintain and re-image computer laboratories
- Supported clients in issues with using and teaching in computer laboratory spaces

#### **Outcomes and Achievements**

 Coordinated multiple staff at multiple locations in the installation of new computer laboratories and disposal of old equipment

### **HONOURS & ACHIEVEMENTS**

2018	Sustained Performance Award	Griffith University - ITI Director Recognition
2017	Systems Administrator of the Month	Griffith University - S3 Team Recognition
2012	Outstanding Client Service	Griffith University - ICTS Staff Recognition

#### REFEREES

(contact details available upon request)