Robert Nelson

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SKILLS

PROGRAMMING
Advanced:
Kubernetes • Python • C# • Bash
Intermediate:
C/C++ • Typescript • Javascript • SQL
Familiar:
React • Java • ARM/x86 Asm

CLOUD
Intermediate:
AWS • Azure

SOURCE CONTROL, CI/CD
Advanced:
Git • Gerrit • Jenkins
Intermediate:
Argo CD • Argo Workflows

OTHER SKILLS
Linux Dev-ops • Sound Engineering • Reverse Engineering

EDUCATION

CARLETON UNIVERSITY
BEng - Computer Systems Engineering

ABOUT ME

I'm a person who is interested in a lot of different things. When those interests get me involved in something, I have a tendency to throw myself into my projects and do my best to achieve more than people expect. Despite that, I think that I'm still quite personable and easy to get along with!

WORK EXPERIENCE

MAGNET FORENSICS | Staff Software Developer
Jan 2022 - Present | Remote
- Led the team that launched the Magnet REVIEW SaaS
- Oversaw the designs of a 20 person team to balance maintainability with delivery speed
- Designed and implemented an error proof data ingestion pipeline for large (100GB+) forensics evidence data sets
- Acted as a thought leader for building product features in an monitorable way
- Worked closely with Product Owners to ensure engineering-led and product-led features were balanced appropriately during planning
- Supported customers directly to diagnose and resolve active issues

MAGNET FORENSICS | Senior Software Developer
Jan 2019 - Dec 2021 | Waterloo, ON / Remote
- Implemented a scalable evidence management system in kubernetes
- Built internal dashboards for viewing automation results to improve testing efficiency
- Designed a process for deploying Magnet REVIEW in on-premise and cloud environments
- Implemented an internal tool for quickly and easily querying across 1000+ components of an internal product.

MAGNET FORENSICS | Software Developer
2015 - Dec 2018 | Waterloo, ON
- Co-designed and implemented an in-place refactor of 400k line codebase
- Reverse engineered and added forensics extraction support for a number of third party applications
- Built internal dashboards for viewing automation results to improve testing efficiency

MICROSOFT | Software Development Engineer in Test Intern (2x)
May - Jun 2013, 2014 | Redmond, WA
- Designed and implemented big data backed metrics tool
  - MVC style ASP.NET web front end
  - Behaviour detection heuristic engine
- Designed and implemented a social media scraper for automated user complaint detection

OTTAWA HOSPITAL | Server Developer
Jan - Apr 2013 | Ottawa, ON
- Designed a web management portal for physiotherapy monitoring devices
- Implemented and documented an MVC style site including single step provisioning and monitoring

MICROSOFT | Software Development Engineer in Test Intern
May - Jun 2012 | Redmond, WA
- Lead tester of Windows 8 Store security stage in the production environment
- Identified and fixed bugs during tight deployment schedules

OTHER PROJECTS

PROXIMA ROBOTICS PLATFORM | University Capstone Project

Mar 2014 – May 2015

Designed, built, and tested an embedded robotics platform to be suitable for teaching many different computer systems related topics. Hardware for both the main robot as well as a WiFi control module was designed and fabricated. Finally, software libraries were written such that they are suitable for a student with any skill level.

LIBRA - EDUCATIONAL 8086 EMULATOR | Lead Developer

Development: Sept 2012 – Aug 2013, Maintenance: Ongoing

In collaboration with 2 peers, developed an 8086 emulator with a focus on educational features for use in an intro to computer systems course. Throughout development the professor was consulted ensuring that the software met their requirements. The Libra emulator is now used as the lab software for that course.

INTERNZSTATS - MAILING LIST DASHBOARD | Lead Backend Developer

Development: May - Jun 2013, 2014

A fun project simply intended to answer the question "How many emails do interns at Microsoft send?", the website matured into a realtime metrics panel for monitoring the status of any Microsoft Exchange mailing list.