Barry Robinson | +44 777 079 1061 | barry.w.robinson64@gmail.com

Work Experience

Lead Cyber Engineer, Northrop Grumman UK, Cyber & Intelligence (June 2023 – Present)

- Configured and built u-boot, the Linux kernel, and root file system for the PYNQ-Z1 development board for an OpenCPI platform in support of ongoing work tenders.

- Enhanced internal understanding of Low Probability of Intercept / Detection (LPI / LPD) RF covert communications capabilities through an RF R&D project using FPGA on PYNQ-Z1.

- Improved efficient onboarding of new engineers by mentoring graduate intake in C/C++, machine architecture, Pull Requests and Git issues.

- Contributed to internal R&D project focusing on classifying Radio Frequency (RF) products through machine learning models.

Senior Software Engineer, Alert Logic, Fortra (October 2021 – April 2023)

- Led AWS C/C++ parsing infrastructure by guiding **a** 3-engineer agile team using JIRA, resulting in business goals and improved cross team collaboration.

- Boosted efficiency 20% by optimizing code with Xcode instruments, DTRace, and algorithmic complexity analysis, resulting in reduced resource consumption.

- Increased unit test coverage by integrating Google test with Erlang NIF and Jenkins to publish test results, resulting in enterprise level visibility, and increasing confidence in code product component robustness.

- Unified parsing description language by creating a JQ Path-searchable structure in C++, resulting in a simplified syntax across all formats.

Senior Software Engineer / Product Lead, Genesis Technical Systems (July 2018 – October 2021)

- Achieved successful deployment of Genesis equipment by leading the development of the GEMS 2 management platform in an Agile team utilizing OpenDaylight and Java-centric container architecture to further the goals of integration in AT&T Airship.

- Improved overall packet processing and network performance through the development of a QoS system for a TR101 node implemented using DPDK 18.05.

- Enabled the deployment of ASM-10, an FPGA based TR101 node, by designing and developing the embedded control system for the Access Service Manager (ASM) platform.

Freelance Developer Consultant Mentor and Trainer (2001 to 2018)

- Provided technical tuition, consultancy, and course delivery working in Java J2EE, C/C++, and assembler for various clients such as DEL, BEA, and OtherMedia on a contract basis.

Senior Consultant, Valtech UK Ltd (January 2000 – December 2002)

- Reduced hiring costs and increased technical standards by developing a 'boot camp' training program for new employees.

- Strengthened cybersecurity measures and informed company-wide business planning by leading a team to secure the company's network, developing solutions for ongoing attacks, and creating a report for the business strategy.

- Delivered consultancy, pre-sales consultancy, training course delivery, and mentoring to further the commercial goals of the enterprise.

Research Engineer, RiverSoft Plc, OpenRiver (June 1996 – December 2000)

- Achieved successful investor presentations and growth of the company by securing funding through the implementation of the initial GUI prototype for the Open River network management system.

- Improved code quality and transparency across development teams by implementing coding standards and procedures, source code control, and code reviews.

- Developed a "boot camp" training program to hire and coach physics and math graduates in software engineering to meet the rapid growth and low expenditure goals of the company expected by investors.

Software Engineer, Micromuse Plc, NotCool (1995 – 1996)

- Improved data integration and network management by developing probes and gateway services for Netcool Omnibus, enabling the capture, export, and import of data between external systems and devices.

- Enhanced user interface functionality across multiple platforms by developing GUIs and GUI components on Windows 95, NT, HP UX, and Solaris using technologies such as Visual C++, MFC, GCC, and G++.

- Achieved better security protocols for network management by designing and implementing the first fully functional security protocols for the Netcool Omnibus server.

- Achieved reliable support and debugging by providing 1st line emergency technical support to remote and local clients, ensuring minimal downtime and quick issue resolution.

- Achieved dependable code quality and non-destructive editing by introducing source code control and revision systems using RCS.

Education

B.Sc. Information Systems Analysis and Design - Kingston University (1991 - 1995)

Skills

- C: C17, C++: C++11/14/17/20, Python, Erlang, Java: Java 8 / 11

- Maven, make, petalinux, buildroot

- Real-time systems, Multi-core development / architecture, Multi-threading / PThreads, Algorithmic complexity, Data structures and algorithms, Team leadership and mentoring, Test-Driven Development (TDD)

- Erlang Native Interface Functions (NIF), J2EE, WebLogic Application Server, Lex & Yacc / Bison, Ragel, Protect mode development, Windows services, Kernel modules / device driver development on Linux, FPGA integration, Netronome MicroC on the Agilio CX SmartNIC, DPDK18.05

- Packet processing at Layer 2/3/4, IGMP, DHCP, ARP.

- Junit, Mokito, JRunner, Google Test / Mock frameworks, Jenkins

- HTML / XML, CSS