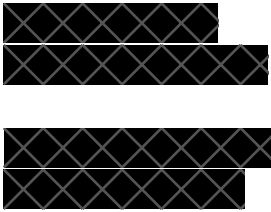# CELSO BARRIGA

PROFILE

A highly skilled and experienced Software Engineer with over 30 years of proven expertise in software engineering, test automation, and test infrastructure development.

EXPERIENCE

Principal Software Engineer, HERE LLC; REMOTE — 2013-2021

Designed and wrote software for HERE's IT Service Management application. This application automatically discovers (ETL) physical and virtual resources, hosts, network, and storage assets. It manages and maintains the relationships between company products and the resources used by a product. The application was implemented in Python and Django Web Framework in the backend with a REST API and JavaScript using the ExtJS framework in the frontend. Running in Docker container and deployed in AWS.

Principal SQA Engineer, iRobot Burlington, MA — 2012-2013

Software functional testing for iRobot home robot products.

- Developed and executed manual test cases to exercise the different robot behaviors.

- Drove software bugs' lifecycle, from reproduction through resolution.

- As needed, wrote Python test scripts and tools to help with the manual tests.

Senior SQA Automation Engineer, Dell/EqualLogic; Nashua, NH — 2010-2012

Test Framework and Test Application Developer for the Quality Assurance Group for testing Dell's NAS and SAN storage solutions.

- Wrote test scripts in Perl to test Storage Attach Network (SAN) products against previously written test plans in Perl.

- In Perl, developed an object-oriented test class library and test scripts for the Network Attach Storage products (NAS).

- Contributed to the redesign of the automation groups' object-oriented testing framework. Implemented in Perl.

- Various other tools are developed in Perl as the need arises.

Principal Software Sustaining Engineer, Sycamore Networks; Chelmsford, MA — 2000-2009

Development and maintenance of the different daemons, running in Linux, providing system management features of the SN16000 optical switch. Developed tools and utilities to capture customer data from the fields or provide temporary fixes. Applications were written in C and C++, while tools were either in Perl or bash.

- Developed software patches to fix bugs and enhance capabilities after product release.

- Developed various tools to gather field data or fix customer issues.

- Converted a manual CD master creation procedure to an automated system that reduced the fail rate of master CDs and improved software traceability.

- Performed Linux Platform Engineering duties by maintaining Sycamore's own Linux distribution, recompiling kernels, and maintaining the company's product emulator code.

Principal SQA Automation Engineer, Sycamore Networks; Chelmsford, MA — 2000-2004

Development of software test harness, libraries, and utilities for the Software Quality Assurance group in testing the optical core switching product. All are written in object-oriented Perl.

- Recruited to design and develop an internal data-gathering tool to collect system information and produce a cross-referenced HTML report (HealthCheck); used by Field Engineers and internal SQA engineers.

- Designed and developed a Perl test infrastructure and a web-based test harness using various CPAN modules for test automation. Web UI HTML and JavaScript components were generated using Perl CGI.

- Automated previously written test plans, speeding up regression testing.

Principal Software Automation Engineer, Lucent Technologies; Westford, MA — 1998-2000

Software test tools and utility development for the core switching SQA Group. All done in C++ and Perl.

- Contributed to designing and developing a CORBA-based test database used in writing common test cases for different interfaces.

- Developed software libraries for interfacing third-party test equipments to the existing test infrastructure.

Member of Technical Staff, Sun Microsystems; Cupertino, CA — 1998

SQA Engineer for the JavaOS running on Sun's network appliance. Project ended.

- Developed test plans and executed test cases for the device drivers development kit of the JavaOS platform.

- Partnered with the technical publications department in writing the developer documentation for the device driver kit.

Member of Technical Staff, Netscape Corporation; Mountain View, CA — 1997-1998

SQA Engineer for the browser's Java Virtual Machine's AWT framework.

- Developed test plans and test cases for the different classes of the Java Abstract Windowing Toolkit (AWT) for the Mac OS platform.

Software Test Engineer, Avid Technology; Tewksbury, MA — 1997

SQA Tools and Automation

- Developed a tool that automatically watches nightly builds of the Media Composer product, installs it, and runs the smoke test. Results are automatically emailed to test engineers.

Senior SQA Engineer, Apple Computer Inc.; Cambridge, MA — 1996-1997

Device Driver SQA Engineer for the company's notebook product lines.

- Developed test plans and executed test cases for the device drivers of the Powerbook computers.

SQA Engineer, Symantec Corporation (formerly THINK Technologies); Bedford, MA — 1994-1996

Test engineer for the Mac OS Development Tools.

- Developed and tested various releases of Symantec C++ for Mac OS, including the initial release of Symantec Café for Mac OS.

- Developed various sample applications to test most of the classes in THINK Class Library, Symantec's application framework for Mac OS.

- Maintained the bug database for C/C++ compilers, Linkers, Debuggers, and IDE and added new test cases to the regression suite.

Technical Support Engineer, Symantec Corporation (formerly THINK Technologies); Bedford, MA — 1993-1994

Development Tools support

- Provided telephone and online technical support for the Symantec C++ development environment, including the C++ compiler, IDE, and debuggers.

- Wrote several sample applications to showcase different compiler features and class libraries.

- Wrote several Q&A articles for the MacTech magazine on developers' most frequently asked questions on how to use Symantec's development tools environment and class library.

PREVIOUS RELEVANT EXPERIENCE

Software Engineer, **Atlantic Turnkey Systems**, Amherst, NH

Software Engineer, PC Networking Group, **Microdyne Corporation**, Westford, MA

Unix System Administrator, Test Engineering Group, **Vitesse Semiconductor**, Camarillo, CA

Data Entry Specialist, **Sheridan Summit**, Los Angeles, CA

Product Engineer, **Fairchild Semiconductor**, Cebu City, Philippines

EDUCATION

University of Massachusetts, Lowell, MA (Formerly University of Lowell) — MS Computer Engineering, 1989
University of San Carlos, Cebu City, Philippines, 1983