

# Celso Barriga

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## SUMMARY

A highly skilled and experienced Software Engineer with over 20 years of proven expertise in software engineering, test automation and test infrastructure development.

## AREAS OF EXPERTISE

- Experience Building Application Software
- Provide Development and Testing Support of Other Engineers
- Experience Working With C/C++, Linux/ Unix, Perl, bash, AWS API, and Git
- Thorough Understanding of Computer Architecture, Operating Systems, and Data Structures
- Working Knowledge of Web Application Development using Python and Django Framework
- Work Well Independently and Within a Team Setting
- Ability to Analyze Complex Technical Information

## PROFESSIONAL EXPERIENCE

**HERE Technologies, formerly part of Nokia Maps**, Burlington, MA 2013-Present  
Principal Software Engineer, Systems Management and Tools

Designed and wrote software for HERE's IT Service Management application. This application automatically discovers 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, and with JavaScript using ExtJS framework in the frontend. Running in Docker container and deployed in AWS.

**iRobot**, Bedford, MA 2012-2013  
Principal SQA Engineer, Home Robot Division

Software functional testing for iRobot's home robot products.

- Developed and executed manual test cases to exercise the different robot behaviors.
- Drove software bugs' lifecycle, from reproduction through resolution.
- Wrote Python test scripts and tools to help with the manual tests, as needed.

**Dell/EqualLogic**, Nashua, NH 2010-2012  
Senior SQA, Automation Group

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 a previously written test plans in Perl.
- Developed an object-oriented test class library and test scripts for the Network Attach Storage products (NAS), in Perl.
- Contributed to the redesign of the automation groups's object-oriented testing framework. Implemented in Perl.
- Various other tools development in Perl, as the need arises.

**Sycamore Networks**, Chelmsford, MA 2000-2009  
Principal Software Engineer, Software Sustaining Group (2004-2009)

Development and maintenance of the different daemons, running in Linux, providing system management features of the SN16000 optical switch. Developed different 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 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.

**Sycamore Networks**, Chelmsford, MA

Senior SQA Engineer, SQA Automation Group (2000-2004)

Development of software test harness, libraries, and utilities for the Software Quality Assurance group in testing the optical core switching product. All 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; 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.

**Lucent Technologies** (formerly Ascend Communications), Westford, MA

1998-2000

Principal Software Engineer, Automation, Tools, and Services Group

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

- Contributed to the design and development of 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.

**Sun Microsystems**, Cupertino, CA

1998

Member of Technical Staff, JavaOS Group

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 technical publications department in writing the developer documentations for the device driver kit.

**Netscape Corporation**, Mountain View, CA

1997-1998

Member of Technical Staff, Java and JavaScript Group

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.

**Avid Technology**, Tewksbury, MA

1997

Software Test Engineer

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.

**Apple Computer, Inc.**, Cambridge, MA

1996-1997

Senior SQA Engineer, Cambridge R&D Group

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.

**Symantec Corporation** (formerly Think Technologies), Bedford, MA

1993-1996

Software QA Engineer (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 adding new test cases to the regression suite.

Technical Support Engineer (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 library.
- Wrote several Q&A articles for the MacTech magazine on the most frequently asked questions by developers 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

MS Computer Engineering, 1989

University of Massachusetts at Lowell (formerly University of Lowell), Lowell, MA

BS Electronics and Communications Engineering, 1985

University of San Carlos, Cebu City, Philippines