

# Daniel Ibanez

## Software Engineer - IBM Corporation

Pennsauken, NJ - Email me on Indeed: [indeed.com/r/Daniel-Ibanez/d68205f758f50326](https://indeed.com/r/Daniel-Ibanez/d68205f758f50326)

- Software engineer with 10 years of experience in software development and 5 years of experience in system test/QA.
- Full knowledge and experience in all phases of the Software Development Life Cycle.
- Extensive experience in a wide range of software applications which include; low level microcode, device driver, test tool, automation, web and graphical user interface programming.
- Strong grasp on structured as well as OO (Object Oriented) programming.
- Proficient in designing and implementing complex multi-threaded algorithms.
- Expert in analyzing, debugging and resolving a wide range of software defects.

### WORK EXPERIENCE

#### Software Engineer

IBM Corporation - July 2014 to Present

Worked for the Data Storage 8000 Microcode Development Team.

- Responsible for Hardware Resource Management (HRM) component; an interface between other system components and data storage hardware, coordinating multiple hardware component states across dual clusters through the use of a state machine.
- Coded in C/C++ in an AIX multi-threaded low-level development environment, implementing complex algorithms consolidating various states in threads attached to several CPUs and managing two hardware resource state machines across two data storage servers.
- Worked with the PCIe standard in the implementation and development of C hardware configuration source code.
- Coded in shell scripting using extensive sed/awk programming to configure multiple hardware system components.
- Analyzed, diagnosed and resolved many complex test team and customer issues.
- Performed unit, and integration tests on all software defects assigned.
- Provided support to test team on a daily basis as well as off peak and weekend hours in support of various clients through the use of a field support phone.

IBM Corporation - Tucson, AZ - November 2012 to Present

#### Software Test Engineer

IBM Corporation - November 2012 to June 2014

Worked for the Data Storage Flashsystems SLT Team.

- Conducted SLT (System Level Test), white/black box, regression, stress, performance and client user recreate tests in multiple platforms (Linux/AIX).
- Designed, created and executed multiple test plans, testcases and test procedures.
- Log and update test status and defect resolutions.
- Involved in planning, coordinating and developing test plans, testcases, and test procedures
- Execute, collect, analyze and report test data and results to immediate as well as extended team.
- Effectively automated various testcases and test tools operations in multiple platforms(AIX/Linux) using shell scripting and perl.

#### Computer Scientist

ASRC Research and Tech. Solutions - August 2012 to October 2012

Worked for Terminal Automation Engineering Group for the Federal Aviation Administration supporting the STARS program

- Effectively performed installation, testing, upgrading and migration of STARS software builds.
- Successfully managed each assigned support issue to successful resolution.

ASRC Research and Tech. Solutions - November 2009 to October 2012

### **Software Engineer**

ASRC Research and Tech. Solutions - December 2010 to August 2012

Member of the Terminal Automation Engineering Group for the Federal Aviation Administration supporting the AEFS (Advanced Electronic Flight Strip System)/EFSTS NAS systems; client/server software applications.

- Coded in a C++ multi-threaded Windows Borland embedded environment using agile driven development methodology.
- Designed and implemented multiple complex algorithms using TCP/IP socket network programming for server side development.
- Successfully used OpenGL technology on client side windows GUI development.
- Supported and maintained development activities for EFSTS (Electronic Flight Strip Transfer System) project in Visual Basic.
- Coded in C for a keyboard embedded device.
- Efficiently worked with MySQL DB as well as stored procedures/scripts, and XML files for C++ Borland application development.
- Performed unit and integration tests on all new functionality and software defects assigned.
- Assisted in the execution of the full functional system test plan at various point release software phases.
- Successfully met with and interacted with customers at multiple key sites for various functions; system install, uninstall, software drop, site survey and requirement meetings.

### **Java Software Lead Developer**

ASRC Research and Tech. Solutions - November 2009 to December 2010

Member of the Communications, Flight Service & Weather Engineering Group (AJW-17) for the Federal Aviation Administration.

- Designed and implemented tools in Java for the automation of financial processes using Eclipse IDE.
- Implemented new functionality with Java/J2EE, JSF, JSP, JavaScript and AJAX for CMAS (Contract Management Application System). Improved/re-engineered existing functionality, and maintained the current web application UI.
- Created multiple UML use cases and class diagrams for thorough and efficient design.
- Used PL/SQL and stored procedures to interface with the persistence layer; using Oracle.
- Successfully written and executed unit and integration tests on all software defects and new functionality assigned.
- Diagnosed and resolved multiple test and customer issues in a timely manner.

### **Software Developer/QA Engineer**

Falconstor Software Inc - Melville, NY - February 2007 to April 2009

- Worked for the VTL (Virtual Tape Library) Functional Verification Quality Assurance Team.
- Designed and implemented new test and automation tools for the VTL and SIR products; client/server applications using C++ and Linux/UNIX shell scripting.
- Effectively automated various Tivoli TSM backup application operations in multiple platforms(AIX/UNIX-Solaris/Linux) using UNIX/Linux shell scripting, PERL and batch/cron jobs.

- Successfully designed and implemented multiple efficient shell/PERL scripts for backup data creation as well as data collection/parsing.
- Conducted UAT, functional, white box, system, regression, stress, performance and user recreate tests in multiple platforms.
- Designed, created and executed multiple test plans, testcases and test procedures for the VTL and SIR(Single Instance Repository) products.
- Attended scheduled meetings on test status and defect resolutions.
- Successfully performed on site client installs and technical support.

## **Software Engineer**

IBM Corporation - August 2005 to February 2007

Worked for the Virtual Tape Storage Microcode Development Team.

- Responsible for the logging, messaging, and hardware configuration firmware components of the Virtual Tape Server (VTS); a client/server application.
- Coded in C/C++ in an AIX multi-threaded low-level development environment.
- Designed and implemented multiple complex pthread and inter-process communication (IPC) synchronization algorithms through the use of mutual exclusion, semaphores, message queues and shared memory.
- Coded in shell scripting using extensive sed/awk programming to configure multiple hardware and networking system components.
- Created multiple batch processing development utilities using C/C++ and AIX korn shell scripting.
- Created multiple Remote Procedure Calls (RPC) in C for system software.
- Analyzed, diagnosed and resolved many test team and customer issues.
- Performed unit, and integration tests on all software defects assigned.
- Provided support to test team on a daily basis as well as off peak hour support to various clients.

IBM Corporation - Tucson, AZ - July 2003 to February 2007

## **Software Engineer in Test**

IBM Corporation - July 2003 to August 2005

Worked for the Functional Tape Storage Verification Test Team.

- Responsible for the design and development of multi-threaded automated testcases with the purpose of testing embedded system tape drives using C/C++. Testcases issued low-level SCSI commands to test tape drive microcode and drivers.
- Coded in C/C++ in an AIX RS/6000 multi-threaded low-level development environment.
- Responsible for the development and maintenance of a web application defect incident reporting/tracking tool using the Java/J2EE, JSP, and JavaScript.
- Successfully created multiple Java applications using XDE Tester to test GUI Testtool suite.
- Successfully interfaced with DB2 database through SQL queries for test tool application development in C/C++ and Oracle database for web application development in Java.
- Developed complex and efficient error analysis and recovery procedures for various tape drives using C/C++.
- Conducted UAT, white box, functional, system, performance, error inject, regression, stress, and customer application model tests.
- Involved in planning, coordinating and developing test plans, test procedures and testcases.
- Execute, collect, analyze and report test data and results to immediate as well as extended team.

## **EDUCATION**

### **Bachelor of Science in Computer Science**

California State University Fullerton

## **General Studies**

Glassboro High School - Glassboro, NJ

### **SKILLS**

AIX (10+ years), C++ (10+ years), SCRIPTING (8 years), LINUX (3 years), PERL (3 years), JAVA (3 years), JAVASCRIPT (3 years)

### **ADDITIONAL INFORMATION**

#### **TECHNOLOGY SKILLS**

Languages C, C++, Java, Visual Basic

Scripting Shell(Bourne, Korn), awk/sed, PERL, JavaScript, AJAX

Operating Systems AIX, Solaris, UNIX, Linux, Windows

IDE/Test Tools Eclipse, Websphere, IBM Rational Suite, Quick Test Pro, Borland, Visual Studio 2006

Software TSM, NetBackup, CommVault, Microsoft Office Suite, Lotus Suite

Database Oracle, DB2, MySQL, SQL, PL/SQL

Protocols/Misc PCIe, TCP/IP, FC, SCSI, iSCSI, SAN, SCSI command set, Sockets, CSS, HTML. XML, UML, openGL