

John Williams

Nashville, TN - Email me on Indeed: [indeed.com/r/John-Williams/fff4754129b5cdc0](https://www.indeed.com/r/John-Williams/fff4754129b5cdc0)

Accomplished, highly versatile, fast learning developer seeking work within the Nashville area

WORK EXPERIENCE

Developer

Forty AU - Nashville, TN

Sr Java Programmer

Permanent General Assurance Corp. - Nashville, TN - February 2015 to June 2017

- Maintained agent facing point of sale (POS) for car insurance in Java with Struts and Spring
- Rolled out POS for business in new states and revised POS for business in existing states
- Configured POS using company owned domain specific language
- Made recommendations for process improvement

Staff Engineer

Vanderbilt University - Nashville, TN - January 2009 to February 2015

- Advised on the Future Airborne Capability Environment (FACE) portable flight software standard regarding C, C++, Java, POSIX, and OpenGL technologies
 - Wrote as part of a team the FACE Conformance Test Suite frontend using Python in an Agile environment (adopted by Open Group consortium as official software)
 - Devised testing methodology and led team that developed cross-platform backend of FACE Conformance Test Suite which tests both OS and user applications written in C and C++
 - Learned details of C 99, C++ 2003, POSIX 2008 standards as part of C/C++ backend creation
 - Provided direction to both internal and external customers on questions regarding C 99, C++ 2003, and POSIX 2008 standards
 - Headed design and development of cross-platform backend of FACE Conformance Test Suite which examines both Java VM libraries and user applications at the class file level using a custom class file loader written in C++ to avoid bias from any particular JVM
 - Learned details of Java VM and classfile specifications as part of Java backend creation
 - Advised formal development methodology used by DARPA's Adaptive Vehicle Make (AVM) team leading to improved developer productivity and fewer late nights
 - Administered cloud environment and services for DARPA's Fast Adaptable Next Generation (FANG) Ground Combat Vehicle challenge
 - Developed Android Mobile Middleware Objects (AMMO) backend service as part of a team
 - Headed configuration of continuous integration (Jenkins) for multiple projects to augment Agile workflows allowing immediate feedback to developers committing code
 - Developed various prototype applications for the Army's Brigade Combat Team Modernization (BCTM) program using a model-based approach
 - Wrote Python code to create a BuildBot continuous integration system for BCTM applications
 - Developed 3D simulation of SUGV (backpack robot) and UAV (flying robot) integrated with OneSAF battlefield simulation package for BCTM
- Experience .) Vanderbilt University, ISIS - 1/2009 to Present - Staff Engineer .)
- Performed Linux system administration duties for multiple projects
 - Analyzed and advised on International Traffic in Arms Regulations (ITAR) office policies

Programmer

Experimental Design and Analysis Solutions, Inc. - Spring Hill, TN - March 2007 to December 2008

- Project Lead for new turbo-machinery (jet engines and hydro power generators) analysis application written in C++/Qt 4.4 with WYSIWYG interface and batch reporting capabilities
- Maintained cross-platform (Linux and Windows) real time data acquisition, monitoring, and analysis system for vibration and fatigue testing of turbo-machinery in C++
- Headed ISO-9001:2000 certified quality assurance for software releases
- Created cross-platform, automated build system with qmake targeting make, nmake, and Visual Studio project files
- Advocated for improved quality control, policies, and documentation
- Instituted formal development guidelines to both unify fragmented development efforts and ease the transition for new and junior developers
- Administered Linux workstations and Linux web, development, test, and storage servers

Software Developer

Ionetrix, Inc - December 2005 to February 2007

- Designed and implemented firmware for data time tagging and annotation devices (Annotator line) in C/ASM for TI MSP430 microprocessors
- Devised communication API's for the Annotator product line in Java and C++
- Developed data acquisition, analysis, processing, and presentation software and APIs (EDGAR) in Java and C++ (JNI)
- Integrated Python technology into analysis application to allow custom processing by customer scripts

Software Developer

Pender Technology - May 2003 to November 2005

- Led software development/integration of the Fourier transform infrared (FTIR) instrument FIST, a dual channel (mid-wave and long-wave) imaging spectrometer
- Responsible for communications (RS232 and TCP), data acquisition (local and remote via StreamStor RAID), data reduction/analysis, and presentation code within the Advanced Data Acquisition/Analysis and Presentation Toolkit (ADAPT), a Windows 2000 application written in Java with C++ (JNI for direct frame grabber access)
- Participated in development/integration of high resolution Imaging Colorimeters with human eye response filters (XYZ) and Night Vision Radiometers
- Collaborated as part of a team responsible for communications (RS232 and TCP), data acquisition, data reduction/analysis, and presentation code in support of Pentec instrumentation within ADAPT
- Responsible for system integration and communications code within ADAPT
- Replaced copper wire bundle with Ethernet and implemented an embedded controller with AServer (pluggable server version of ADAPT) resulting in:
 - > Reduction of physical cable load to three (110AC for power, fiber for high speed/low latency data, and Ethernet for command/control and low speed/high latency data)
 - > Increased allowable distance between instrumentation and control station from two meters to 100+ meters

EDUCATION

B.S. in Computer Science

Middle Tennessee State University

December 2003

SKILLS

Primary Technical Proficiencies

Languages: C, C++, Java, Python

Platforms: Linux, Windows 9X/2K/XP/2003/Vista/2008/7/8

Tools: GCC, G++, Visual Studio 6/.Net/2003/2005/2008/2010, J2SE 1.4/1.5/1.6/1.7, IntelliJ

IDEA, Eclipse, Qt Creator, PyCharm, Git, SVN, CVS, make, Qt, qmake, msbuild,

Jenkins, Java Native Interface (JNI), Ant, JUnit, Redmine, Protobuf

Additional Expertise

ITAR experience - accustomed to handling, working with, and protecting sensitive information and materials

Agile experience - accustomed to evaluating, planning, and executing short work units to complete a project as a whole

Assembly (MCS51, x86, MSP430), C#, CSH, BASH, PowerShell, grep, awk, sed, FreeBSD, HP-UX, Nullsoft Scriptable Install System (NSIS), GTK+, FLTK, OpenGL/GLUT, Java Advanced Imaging (JAI), Java Image I/O, Java Comm