### WILLIAM GILREATH

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# 345 Commercial Street NE Salem, Oregon 97301

#### **Profile**

I am a multifaceted software engineer, web developer, and computer scientist. I love working with software--developing, testing, writing, and analyzing. In my spare time, I write both code and technical articles, and narrative prose--novels, short stories, chapters, and poetry.

### Experience

Independent Software Engineer, self-employed Picayune, MS/Salem OR — 2006-Present

- Created cross-platform Java app to compress proprietary database file format into ZIP file.
- Developed web form for multiple e-mail of course/work evaluation system.
- Developed Java library API to interface with online key-value store NoSQL database.

## Software/Database Engineer, Planning Systems, Inc. Stennis Space Center, MS — June 2006-November 2006

- Administration of information on MySQL database of sensor/buoy data on Linux server system.
- Developed and maintained Java application library for database management utilizing JDBC database driver.
- Wrote data population application with Java and shell scripts to import and export raw data from the database system.
- Assisted in improvement and verification of documentation presented on the intranet used by other scientists and software developers.
- Consulted in the development of a XML-based message software service project in Java.

## Independent Technical Author, Kluwer/Springer-Verlag Picayune, MS — March 2002-February 2003

- Lead author on computer architecture book, with Dr. Phillip A. Laplante,
  "Computer Architecture: A Minimalist Perspective," published March 2003.
- Researched the technical material relating to computer architecture and engineering for the text.
- Created tables, diagrams, and visual aids for book chapters illustrating concepts and principles relating to computer architecture.
- Developed chapter questions and exercises as means to assess level of understanding and comprehension of material.
- Created example programs in C programming language, assembly language to demonstrate computer architecture principles.

## Java Consultant/Developer, J.R. Simplot Company Boise, ID — February 2002-June 2002

- Mentored software engineers by hands-on training with Java and the objectoriented paradigm.
- Rewrote and translated existing code to Java for several in house applications.
- Developed in conjunction with other developers a Java applet for interactive data visualization.
- Authored reference documentation for training and education with Java and the object-oriented paradigm using UML.

# Firmware/Software Developer, Hewlett Packard/Adecco Technical. Boise, ID — March 2001-February 2002

- Install/webmaster of Apache Tomcat web server usage and development of internal web apps, tools, and utilities.
- Build printer firmware and debug failed builds on a distributed build system using C/C++.
- Investigate and assist in debugging scripts, utilities, and tools in C/C++, UNIX shell, Perl script, and JavaScript.
- Worked and developed embedded C source as part of printer firmware development kit.
- Development of HTML forms, web pages, CGI scripts, JavaScript libraries for web apps and tools.
- Maintenance, testing of software document and development tools in C/C++ in UNIX.
- Provided support for libraries and scripts for distributed build system.

## Software Engineer, Micron Technology. Boise, ID — June 1999-November 2000

- Developer for manufacturing data communication system and internal middleware library using TCP/IP and UDP protocols in C++ for Unix/Windows.
- Developed and assisted in database development on Oracle, Sybase in PL/ SQL and Transact SQL.
- Code maintenance, revision and support for existing legacy software in C/C++ on Windows, UNIX systems.
- Assisted in assessing and planning requirements for application programming interfaces relating to SOAP and XML based software.
- Developed regression test suites for software applications and utilities in C++ using distributed middleware messaging.
- Instructor for introductory class in XML and XML application library in C++.
- Developed, debugged, documented, and maintained XML parser in C++
- Maintain and update C/C++ server software running on Windows NT platform as service.

## Lead Research Assistant, Computer Science Dept, Mississippi State. Starkville, MS — July 1996-December 1996

 Led research project with professor in machine learning project for military application.

- Developed, tested, and maintained C/C++ code for machine learning app.
- Modified source code for Improvements in runtime performance, memory usage, and removal leaks.
- Ported source code from SunOS/Unix engineering workstation to Linux on PC.
- Coordinate research efforts with other researchers and reported to professor.

## Engineer Intern/Coop Student, South Mississippi Electric Power Association, Purvis MS — August 1991-May 1994

- Investigated alternative equipment, hardware for new replacement systems in plant equipment.
- Tested new work order/equipment schedule and tracking system.
- Edited user manual explaining use of new work order/equipment schedule system in Oracle.
- Trained and assisted users of new UNIX-based distributed control system.
- Provided computer and technical support for various software/hardware issues.

#### Education

- Mississippi State University, Starkville, MS Bachelor's of Computer Science, 1998.
- Nova Southeastern University, Ft. Lauderdale, FL Master's Computer Science graduate studies June 2005 to July 2006

#### **External Links**

LinkedIn: https://www.linkedin.com/in/wfgilreath/

GitHub: https://github.com/wgilreath

Portfolio: https://wgilreath.github.io/WillHome.html

Stack Overflow: https://stackoverflow.com/users/9205432/william-gilreath

Super-Search: https://wgilreath.github.io/segurama.html

### Skills

Java	Eclipse	SQL	MacOS
C/C++	Netbeans	PL/SQL	Linux
Shell Scripting	Visual Studio/Code	T/SQL	Windows
C#	XCode	CVS	SVN
ClearCase	Oracle	MySQL	Sybase
Git/GitHub	Shell Scripting	Python	IntelliJ
Apache Tomcat	Apache web server/HTTP	XML/SOAP	JSON