

James Haley

PO Box 551 • Tecumseh, OK • (405) 598-5460 • haleyj@hotmai.com

Targeting Software Engineering Positions

- Oklahoma State University graduate offering a strong academic background in Computer Science, and 1.5 years' experience as Health IT Director and Software Engineer III.
- Quickly learn and master new technology; proficient in a range of computer systems, languages, and tools.

Education

OKLAHOMA STATE UNIVERSITY – Stillwater, OK; 1999 – 2002

Bachelor of Science in Computer Science • GPA: 3.32 / 4.0

TECUMSEH HIGH SCHOOL – Tecumseh, OK; 1994 – 1998

Honors High School Diploma • GPA: 4.3 / 5.0

Technology Summary

Methodologies: Object-oriented programming, MFC, Java Swing, Borland VCL
Systems: Windows XP Professional/7/Server 2008 R2; Debian, Ubuntu Linux
Databases: Firebird 2.5, Oracle
Languages: C, C++, Java, JavaScript, HTML, CSS, php, Firebird PSQL, Oracle PL/SQL, x86 assembly, MIPS assembly, Visual Basic for Applications

Job Experience

ABSENTEE SHAWNEE TRIBAL HEALTH AUTHORITY, INC.

- **Software Engineer III** (January 2011 – Present)
- **Acting Health IT Director / Software Engineer III** (Aug 2011 – January 2012)
- **Health IT Programmer** (Jun 2010 – Aug 2011) - Maintenance and development of a multi-million-line C++/PSQL codebase comprising the Absentee Shawnee Tribe's custom electronic medical records program, "Prometheus." Responsibilities included programming, creation of QuickReport and ad hoc reports, user support and training, database maintenance and design, and Meaningful Use coordination for EHR migration. Beginning with promotion in August, 2011, assumed various additional responsibilities including help desk; specification and acquisition of new equipment; setup of new systems with HIPAA-compliant disposal of obsolete hardware; consulting with administration on Information Technology issues; domain controller and server maintenance tasks; and employee evaluation, scheduling, and supervision.

Selected Contributions:

- Created new denial letter system for Contract Health which allows workflow to proceed through three separate departments within each denial batch.
- Increased stability of codebase by devising solutions for major architectural problems.
- Merged an abandoned appointment form redesign with the trunk code and completed project.
- Redesigned enrollments system to eliminate wasteful boolean fields in person records.
- Designed multi-faceted Patient Assessment form for Community Health program.
- Designed cached file system for storing versioned files in database and allowing most recent versions to be downloaded to the user's system using SHA-1 hashes for integrity and version verification.
- Recommended and supervised implementation of Electronic Health Records via Allscripts Pro PM/Pro EHR, and participated in massive integration project with Dentrix Enterprise, WinRx, MedFlow, Orchard Harvest, Carestream PACS, Dragon Medical, and legacy information systems.

TECUMSEH PUBLIC SCHOOLS

- **Library Media Assistant** (Oct 2005 – May 2010) - Responsible for daily operation of high school library, including circulation, shelving, care of books, student discipline, overdue list maintenance, and administration of computer lab. Substitute teacher duties performed on an as-needed basis.

Selected Contributions:

- Established new usage and security policies for computer lab; implemented measures for enforcement including VNC for remote monitoring, "LibBlock" custom application for one-click modification of the Windows XP "hosts" file, installation of software to push updates, PAC script to provide URL-content-sensitive filtering, and group policy settings.
- Authored C++ tool chain to support streamlined production of weekly overdue list, including tools to normalize and convert Library Pro reports into tab-delimited and comma-separated-value lists for import into Microsoft Excel; difference list production.
- Created "ShutdownShell" and "NetMessage" utilities in C++ to support shutting down all computers from one console and sending messages to users on individual machines.

Major Individual Projects

- **The Eternity Engine** (1999 – Present) Open-source modification of id Software’s legendary DOOM. The Eternity Engine provides an experience compatible with the original game while simultaneously delivering advanced editing and rendering features. C++ source code available in SVN repository at <http://mancubus.net/svn/eternity/>. Developed as a team effort with programmers Stephen McGranahan, Joe Kennedy, Julian Aubourg, et al.
- **Halif Engine** (2006 – Present) Custom C++ game engine utilizing the Simple DirectMedia Library for cross-platform delivery of two-dimensional “retro” computer games, previously licensed for an abandoned commercial project. Designed for maximum reusability. C++ source code available in SVN repository at <http://mancubus.net/svn/halif/>.
- **Chocolate Strife** (2009 – 2011) Reverse engineering project authorized by original authors of “Strife: Quest for the Sigil,” a computer game released in 1996 by Rogue Entertainment, Ltd., for which the source code was irretrievably lost. Professional tools utilized including IDA Pro to enable changes made by Rogue to the id Software DOOM codebase to be ported from the binary executable into the “Chocolate Doom” source port as created and maintained by Simon Howard. 100% accuracy achieved within technical limitations; capable of playing back input-based demo files recorded by the original DOS executable file. C source code available in SVN repository at:
<http://chocolate-doom.svn.sourceforge.net/viewvc/chocolate-doom/branches/strife-branch/>.