

DR JAMES GRAHAM

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Overview

Highly motivated senior technologist with ten years of experience and a proven ability to combine broad-based technology, client relationships and solid coding expertise in developing and implementing applications to meet evolving business needs. Extensive experience developing multi-tier applications using C, Perl, Java, and C#. Deep understanding of build engineering processes. Proficient in UNIX shell scripting. Comfortable in Eclipse development environment, Microsoft Visual Studio, and Emacs. History of building software systems with improved functionality and consistently meeting critical requirements.

Experience

- **Senior Software Developer** OpenMake Software / Catalyst Systems 2006 – Present

Collaborated with Chief Architect to design the last major release of the OpenMake product.

Resolved major timing and scaling issues with client-side components by use of SQLite database backend.

Coded major components of the new GUI front-end, based on Eclipse Rich Client Platform technology.

Created the Visual Studio 2005 Addin that interfaces with OpenMake. This work is in C# and interacts with both the MSBuild API and the Visual Studio API.

Visual C++, GCC (GNU C), SQLite, Java, Eclipse, Eclipse Plugins, Eclipse Rich Client Platform, Perl, C#, Visual Studio 2005, Visual Studio 2005 Addins, Tomcat, XML, SOAP

- **Software Developer / Support Tech** OpenMake Software / Catalyst Systems 2002 – 2006

Maintained the core command-line client executables. This work includes coding in C and C++, and adding "glue" scripts in Perl.

Implemented, based on design from Chief Architect, 1/2 of the previous release of the OpenMake product. Responsible for the client-side executables written in C.

Resolved customers' issues. Worked directly with customers via phone and email to fix bugs and troubleshoot issues.

Visual C++, GCC (GNU C), Eclipse, Perl, Tomcat, XML, SOAP

- **Consultant** Catalyst Systems 2001 – 2002

Implemented source configuration management (SCM) and build solutions at multiple customer sites throughout U.S. Projects ranged from two to 16 weeks. Worked directly with SCM managers and developers, at the one-on-one level through to presentations to management.

Received commendations from customers for this work.

Perl, Make, Ant, OpenMake, various SCM tools, various compilers

- **Research Assistant** The University of Chicago 1994 – 2001

Within a team-environment, analysed and published the results of the primary scientific goal of a \$30M and 80 person particle physics experiment.

Hardware work covered building a 2000 wire gaseous drift chamber, a 3000-channel crystal calorimeter, plus readout electronics for the 10000-channel detector.

Software work covered statistical analysis of a 30TB data sample, Monte Carlo simulation, and real-time control of data-collecting hardware.

Wrote a real-time daemon to write data events to tape to do background reduction, saving the experiment \$60,000 and four months in processing time.

C, Perl, Fortran, custom statistical analysis packages, Emacs, bash shell scripting

Skills

- **Technologies**

Expert in Perl. I do my day-to-day coding in C, Perl, and Java, with a bit of C# thrown in. I'm proficient in UNIX shell scripting.

Extremely comfortable with the Eclipse development environment. Familiar with Microsoft Visual Studio 2005.

Familiar with C# and the .NET runtime.

- **Tools and Systems**

Detailed understanding of Build Engineering, including tools such as make, MSBuild and Ant, and scripted solutions.

Solid understanding of SCM and ALM concepts, and experience with a number of SCM and version control tools (CVS, Subversion, MKS, CA AllFusion Harvest, Microsoft Team Foundation)

- **Communications**

Corporate blog available at <http://www.openmakesoftware.com/insights>

Comfortable speaking to groups of two to 200, from my own team to customer management.

Proven ability to think and communicate at the conceptual as well as the tactical level.

Education

- **The University of Chicago** Chicago, IL *Ph.D. in Experimental Particle Physics, December 2001*

Thesis: Measurements of The Direct CP-Violating Parameter $Re(\epsilon'/\epsilon)$ and the Kaon Sector Parameters Δm , τ_S and ϕ_{+-}

- **McGill University** Montréal, QC *B.Sc (Hons) Physics, May 1993*