John K. Byrne

810 12th Ave., Apt. #222   (920) 205-7723
Seattle, WA 98122   hyperbolix@gmail.com

Objective

Software engineer seeking development work in the top and middle platform layers. My current interests include 3D graphics, Android app development and multithreading. Above all, I want to write elegant code.

Work History

Microsoft Corporation   Redmond, WA
Software Development Engineer   Fall 2009 - Spring 2011

- designed and developed a kernel mode class extension (SerCx) to facilitate the creation of a new UART driver with support for ARM platforms and DMA
- implemented a 16550 UART driver to demonstrate the use of the class extension
- instrumented the driver and class extension to provide debugging support using trace logging
- participated in the design of test cases with a dedicated test counterpart
- cooperated with a dependent team to understand their needs and optimize feature prioritization

NVIDIA Corporation   Santa Clara, CA
Vista Driver Development Intern   Summer 2008

- worked on a team that emphasized quality through frequent code reviews and peer feedback
- debugged kernel mode Vista display drivers compliant with the WDDM using WinDBG
- implemented test cases and a supporting framework targeting specific driver functionality
- implemented core functionality in a driver branch targeting future hardware
- enhanced and debugged extensions for WinDBG to streamline driver debugging efforts

Lawrence Livermore National Laboratory   Livermore, CA
ISCR Technical Intern   Summer 2007

- developed a multithreaded daemon in C++ to handle NetFlow (UDP) packet streams
- utilized POSIX threads and a configuration file parser generated using flex and bison
- supported reconfiguration without restart using signals, including thread startup and shutdown

University of Wisconsin - Center for Limnology   Madison, WI
Database Application Programmer   Summer 2006 - Spring 2007

- developed a C# .NET application allowing scientists to take real-time measurements of living organisms using a camera attached to a microscope, following the MVC architectural pattern
- developed servlets and portlets for the Apache Tomcat container and Gridsphere JSR168 portal

Education

University of Wisconsin - Madison   Madison, WI
BS in Computer Sciences   Spring 2009

- **Relevant Courses:** Algorithms, Artificial Intelligence, Bioinformatics, Compilers, Computer Architecture, Computer Graphics (Intro & Advanced), Computer Game Technology, Databases, Information Security, Linear Algebra, Networking, Statistics and Markov Chains
- **Languages:** Java, C, C++, C#, Perl, PHP, BASH, SQL, HTML, CSS, XML, Javascript, LaTeX
- **Other:** competed in the ACM International Collegiate Programming Competition four times