

Jeremy Kelly

Software development
Mobile / embedded / desktop

www.anthemion.org
support@anthemion.org
Des Moines, Iowa

Expertise

- **Mobile and Embedded:** Seventeen years of experience on multiple platforms, including Android NDK and SDK, Windows CE, and Linux. Extensive work in touchscreen UI design, cross-platform development, and development for devices with performance constraints.
- **Desktop:** Full-life-cycle experience creating line-of-business and commercial applications. Experience with multiple UI frameworks, including WPF, Windows Forms, and MFC. Much experience designing custom controls and UI frameworks. Broad database background, including database design, SQL, and reports.
- **Skills:** Detailed knowledge of C++, C#, JavaScript, and Git. Extensive object-oriented design expertise in multiple languages. Experience with multithreaded development, socket programming, audio development, and DSP. Some experience with OpenGL, HTML, CSS, and Java. Superior writing, speaking, and planning skills.

Work Experience

- **Independent Software Contractor** **Jun 2013 - Present**
Antefix Consulting LLC, Des Moines, Iowa

Provider of contract development services. Performed extensive bug-fixing, refactoring, internationalization, automated testing, and some new development in desktop and embedded applications used to plan directional drilling projects. Created test apps and utilities for hardware production team, built complex Windows Forms control with full-featured console output. Extensive work with C#, C++, Managed C++, and .NET. Some work with WPF, XAML, Windows CE, and Git.

- **Independent Software Developer** **Jan 2012 - Jun 2013**
Anthemion Industries, Des Moines, Iowa

Designer and developer of *Syntheogen*, music sequencer and synthesizer for Android devices. Created full-featured cross-platform UI framework for touchscreen devices, extensible real-time synthesis engine with multiple synthesis and effect types, and innovative step sequencer with support for polyrhythms, arbitrary time signatures, flexible note ties and bends, and automatic transposition. Extensive work with C++, Android NDK, Win32 API, OpenGL ES, OpenSL, and audio DSP. Some work with Android SDK.

More information at www.syntheogen.com.

- **Computer Engineer** **Mar 2010 - Jan 2012**
HandEra, Urbandale, Iowa

Applications developer for company providing engineering and ODM services. Solely implemented cross-platform UI for in-car media device with satellite TV, DVD and CD player, iPhone/iPod connectivity, and local media browser. Developed software for headless set-top TV appliance, hardware test apps, and cross-platform framework for building console test applications. Extensive work with C++, Win32 API, and Windows CE. Some work with C#, OpenGL ES, COM, Qt, and Linux.

- **Sr. Embedded Software Engineer / Contractor** **Jan 2009 - Jul 2009**
John Deere Intelligent Vehicle Systems, Urbandale, Iowa

Worked with large team on in-vehicle embedded applications used to control tractors and farm implements. Developed extensible on-screen keyboard with foreign language support, assisted with usability improvements and documentation. Worked with C++ and Windows CE.
- **Software Engineer** **Apr 2007 - Dec 2008**
Cummins-Allison, Mount Prospect, Illinois

Part of two-person team that developed front end for new paper currency scanner. Designed and implemented lightweight transaction database with extensible query system, real-time bill image transfer system over TCP/IP, flexible metadata export system implementing numerous legacy protocols over serial connection. Solely responsible for Windows CE platform development with Platform Builder. Extensive work with C++, Win32 API, and Windows CE. Some work with C# and ASP.NET.
- **Software Engineer** **Aug 2000 - Nov 2006**
Peapod, Skokie, Illinois

Mobile and desktop developer for fulfillment team at pioneering web grocer. Created suite of wireless mobile applications used to fulfill over 1000 orders per day, including picking application, quality control and inventory management apps, and launcher. Performed emergency port from PalmOS to Windows Mobile, allowing new facility to open on schedule. Designed and implemented numerous Windows desktop apps, including scriptable server emulator, server stress-testing tool, production monitoring utilities, fulfillment reports, and parts of device inventory system. Extensive work with C++, MFC, Delphi, sockets, barcode scan engines, SQL, Windows Mobile, and PalmOS. Some work with Java, JSP, HTML, and CSS.
- **Software Developer** **Jul 1999 - Aug 2000**
Haven Corporation, Evanston, Illinois

Worked with small team on commercial desktop application used to manage mail-order businesses. Implemented several subsystems with emphasis on UI design, database development, and reports. Extensive work with Delphi and SQL.
- **Software Developer** **Jan 1998 - Jul 1999**
Shared Marketing Services, Chicago, Illinois

Worked with several developers on in-house desktop application used to audit co-op advertising claims. Designed and implemented flexible, user-friendly report management system, configurable mailing generator, version control system for local databases, and numerous complex reports. Extensive work with Delphi, Paradox, and SQL.

Education

- **Bachelor of Science, Economics** **May 2004**
University of Iowa, Iowa City, Iowa

Other Experience

- **www.anthemion.org**

Personal site with development resources, open source software, music, and other projects.