

Jeremy Kelly

Software development
Full-stack web + native

www.antefix-consulting.com
jeremy@antefix-consulting.com
Des Moines, IA

I am a veteran developer with experience on multiple platforms. I favor small, fast-moving teams with good developers, clear code ownership, and lightweight processes. I do contract work through my [consulting business](#). I focus on web development now, but I am interested in native Linux development as well.

Expertise

- **Web:** Full-stack development experience with JavaScript, React, Redux, Node, Express, jQuery, Handlebars, HTML5, Bootstrap, and CSS. Experience with responsive and PWA web design. Broad experience with multiple databases, including database design and SQL.
- **Native:** Experience on a wide range of mobile, embedded, and desktop platforms, including Android NDK and SDK, Linux, Windows, Windows CE, and PalmOS. Extensive experience with touchscreen UI design, cross-platform development, and low-level performance optimization.
- **Other:** Exceptional design and technical writing skills. Significant past experience with C++ and C#, plus deep OOD expertise in these and other languages. Much experience designing custom UI frameworks and custom controls, plus work with multithreaded development, Windows Forms, WPF/XAML, and Win32 API. Some experience with Java, OpenGL, Berkeley sockets, audio development, DSP, and genetic algorithms.

Work Experience

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

Provider of contract development services. Solely designed and developed e-commerce site for local-foods co-op, with broad range of shopping, member management, inventory, order fulfillment, in-store checkout, and reporting functionality. Added fixes and UI functionality to React SaaS app, plus Microsoft Teams integration to Express backend. Developed geometry library and genetic algorithm used to plan directional drilling projects, plus many unit tests. Created Android test apps for device assembly line, with numerous automated and interactive hardware tests, plus wireless reporting to result server. Built complex Windows Forms control with full-featured console-style output. Much bug-fixing, refactoring, and internationalization in multiple legacy apps. Extensive work with JavaScript, C#, C++, React, Redux, Node, Express, Handlebars, HTML5, CSS, MySQL, WPF/XAML, .NET, and Git. Some work with Azure, SAML, SCIM, jQuery, Bootstrap, PostgreSQL, Java, Android SDK, and Jenkins.

See details on these and other projects at www.antefix-consulting.com.

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

Solely designed and developed music sequencer and synthesizer for Android devices, with cross-platform UI framework for touchscreen devices, extensible real-time synthesis engine with multiple synthesis and effect types, and flexible sequencer with innovative UI. Extensive work with C++, Android NDK, Win32 API, OpenGL ES, OpenSL, and audio DSP. Some work with Android SDK.

View user documentation 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 OpenGL ES, COM, Qt, and Linux.
- **Contractor / Sr. Embedded Software Engineer** **Jan 2009 - Jul 2009**
John Deere Intelligent Vehicle Systems, Urbandale, Iowa
Worked with large team on in-vehicle embedded applications. Developed extensible on-screen keyboard with foreign language support. 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. Assisted with ASP.NET app used to manage scanned data. Extensive work with C++, C#, Win32 API, and Windows CE. Some work with ASP.NET, HTML, and CSS.
- **Software Engineer** **Aug 2000 - Nov 2006**
Peapod, Skokie, Illinois
Sole mobile developer for fulfillment team at pioneering web grocer. Created suite of mobile applications used to fulfill over 1000 orders per day, including picking application, quality control and inventory management apps, and launcher. Also designed and implemented desktop apps, including scriptable server emulator, server stress-testing tool, and production monitoring utilities. Collaborated on mobile web app used to manage inventory. Performed emergency port of mobile apps to new OS, allowing facility to open on schedule. Extensive work with C++, MFC, Delphi, sockets, barcode scan engines, SQL, Windows Mobile, and PalmOS. Some work with Java, Spring, JSP, HTML, and CSS.

Education

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

Other Experience

- **Ogle**
github.com/anthemion-org/ogle-web
A free word-finding game for the web, built with React and Redux, and device-installable as a PWA.
- **Personal website**
www.anthemion.org
Detailed notes covering [JavaScript](#), [React](#), [C#](#), [C++](#), [physics](#), [DSP](#), [Mathematica](#), and more, plus open source software, music, and other projects.