|  |  |  |
| --- | --- | --- |
| F. Mark Salisbury | | 13284 W Redwick Dr, Boise, ID 83713 • (208) 794-4496 • [fmark.salisbury@gmail.com](mailto:fmark.salisbury@gmail.com) |
|  | Professional Profile | |
| * Nearly 20 years professional experience in designing, building, and maintaining software systems * Enjoy working with and empowering others. Teamwork! * I thoroughly enjoy programming, designing software, testing, and improving software * Hard-working, ambitious, curious, and organized * Excellent problem-solving skills * Breadth of technology skills, ranging from low level C/C++ code to backend C#/Java/Database to front end JavaScript UI | |
| Nerdspeak | |
| ARM, Android, **C++**, **C#**, **C**, **CMake**, COM, CSS, Digital Signatures & Encryption, **HTTP**, GTest, **HTML5**, **Java**, **JavaScript**, **JSON**, **Linux**, MFC, MIPS, MSTest, **.NET**, **PHP**, Perl, Python, QuickBasic, QUnit, **REST**, SOAP, SQL, SSL, Unix Shell Scripting, VB/VB.Net, Web APIs, Win32, WPF, x86 Assembly, XAML, XML, Yocto.  Deep experience with many open source projects and also with Microsoft technologies. Contributor to several open source projects (WebKit, curl, CMake, vcpkg). | |
| Professional Experience | |
| Aug. 2002 – Present, Firmware Engineer HP Inc.  November 2018 – Present  *Localization (C++, Python)*   * Recognized that our different business units have flaws in localization process and implementation. * Led out on the design of a new process and firmware implementation, eliminating missing translations and minimizing firmware RAM cost of localization. * These changes will result in greater accuracy and lower cost.   July 2017 – August 2018  *HP Accessibility Assistant (C++, JavaScript)*   * Contributor to the design and implementation of the HP Accessibility Assistant, a device and set of firmware features that make HP devices more accessible to users with disabilities. * Though I contributed to this effort in several areas, my main deliverable was the design and implementation of a screen reader built into the UI. * The efforts of our small team enabled HP to win hundreds of millions of dollars of contracts.   May 2014 – Present  *SysTrace WebViewer (HTML5, JavaScript)*   * Developed HTML5 application to view and analyze low-level logs from HP printers; viewer shows visually how CPUs are allocating clock cycles between different tasks. It shows key events that are occurring on the device – as well as all other log statements developers choose to trace. * It has been instrumental in solving various performance and other defects; it’s been used by HP engineers around the globe.   Jan 2013 – Present  *Omni (Web-Based Enterprise Printer/Copier) User Interface (C++, C#, JavaScript, CSS)*   * Helped develop modern web-based UI for HP Printer/Copiers. User interface has been praised by customers for responsiveness and ease of use. * As a technical lead, worked with engineers in the US, Brazil, and India. * Solved many technical problems – memory leaks, server driven eventing for REST based data models, key based navigation, etc. * Made our unit test suite run FAST. We developed a qunit based test suite. I parallelized it to run on 8 (or more) CPU cores at a time. * Every code integration tests our UI unit test suite of over 8,000+ JavaScript driven unit tests – both behavior and screen capture based. Test suite completes in about 3 minutes.   July 2009 – Present  *WebKit Browser (C++ / C#, HTML 5, JavaScript, ARM, MIPS & x86)*   * Lead engineer in HP on WebKit (powers web browsers, including Safari and Chrome\*) * Worked with contractors in Canada and HP engineers in India and Korea. * Kept WebKit up to date, adding new capabilities to our browser (like remote debugger) and created Windows CE browser platform for next generation UI. This UI powers all HP Enterprise copiers and printers today. * Solved challenging performance problems in our display driver more than doubling the frames per second (huge improvement in UI responsiveness). * Solved complex problems, including issues with CPU architecture, compiler bugs, browser performance issues, and native to .NET (COM interop) ref counting / memory management and threading problems. * Set up continuous integration process and created test framework, including an original scripting language to enable browser testing.   Aug. 2008 – July 2009  *OXPd SDKs (.NET / C#, Java, ASP.NET)*   * Worked with senior engineer responsible for OXPd 1.6 architecture to move project from prototype to production; developed initial SDK, including demo application, continuous integration process, and initial tests.   Aug. 2013 – Oct. 2014 DZINESTEPS.COM Boise, ID  Web Developer[*dzinesteps.com*](http://www.dzinesteps.com/) *(JavaScript, MySQL)*   * Designed and implemented website to help homeowners and designers visualize changes to their existing home or new home. * Learned how to use WebGL, an API for 3D rendering in web browsers. * Authored performant imaging algorithms in JavaScript. | |
|  | Personal Projects | |
|  | Jan. 2011 – 2013, *“Medieval Settlers”*  *Android App / Game (Java, Eclipse)*   * Implemented game engine, AI, and user interface, based on *Settlers of Catan* board game. * Created graphics and incorporated artwork. * Created AI test program, which has played millions of games (in a reproducible fashion) and helped me find bugs in my AI. * I intend for app to be free, with paid expansions.   Nov. 2007 – April. 2008, *Travian Database*  *Online Game Database Application (PHP, JavaScript, MySQL)*   * Created website, based on Google Maps API, to help visualize changes in MMORPG Travian. Alliance of players used website to coordinate game playing. Working on this added a whole new dimension to the game.   May. 2006 – 2011, *www.boyscoutwebsite.com*  *Troop Progress Tracking Tool (PHP, JavaScript, MySQL)*   * Created website (together with a co-worker) to help leaders and boys track progress in scouting. * Created scripts to import merit badge and rank advancement data to keep site up to date as BSA changes requirements. * Made site open to other troops.   Aug. 2001 – Feb. 2002, *RISK*  *Windows Game (VB 6, C++, ActiveX)*   * Created game as an opportunity to get other students excited about learning new technologies and as a way to compete against each other. * Competition was a key event for ACM chapter at USU that year. * Main game UI control was created using C++ / ActiveX, while core game interface was written in VB 6. * AI .dlls could be loaded dynamically as long as they were programmed using the SDK I published. | |
|  | Education | |
|  | B.S., Computer Science, Utah State University, Fall 1999 – Spring 2002  Graduated Magna Cum Laude May 2002 3.86 GPA   * Worked between 20-30 hours / week in addition to participating in extra-curricular activities. * Selected as the Outstanding Senior in the Computer Science Department upon graduation. * Served as ACM Chapter President my senior year.   + Organized new chapter of ACM in Computer Science Department at USU, created initial web page for club. Organized elections of 10 officers, club had 70 members.   + Club helped students realize academic, social, and career goals.   + I developed a fully functional graphical RISK game. Members of the club submitted code libraries which battled each other. Winners received prizes from local sponsor (Staples). | |
|  | Personal | |
|  | Family   * My wife, Amanda, and I have 4 children with one on the way!   Service   * I like to help with service opportunities; usually small things through my church. I set aside two years – ’97-’99 - to serve as a missionary for my church in Ukraine. * Boy Scouts. I helped as a leader in a troop from 2005-2008, acting as a mentor for boys in our community. I earned the rank of Eagle Scout at age 13.   Hobbies   * As you can see from my *Personal Projects,* I enjoy programming outside of work. * Computer/console gaming. I enjoy strategy games (like the Civilization series), and every so often I’ll get a game going. I also enjoy programming games, and have written a few simple games. * Outdoors. I enjoy hiking/backpacking and camping, mountain biking and skiing (downhill and cross-country). * Music. I enjoy singing in choirs – I’ve been a member of Idaho’s Hymns of Thanksgiving Choir many years. I play the trumpet too, on occasion. | |