**Jonathan Baker**

Senior Developer (8 Years)

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github: https://github.com/jbakerdev

http://jbakerdev.github.io/

Jonathan is a software developer with 8 years of experience in the JS/HTML5 & .Net stacks. He has developed UI/UX for Geospatial ISR (Intelligence/Surveillance/Reconnaissance) tools for some of the most complex systems in existence: NASA’s mission control center, the Army’s Future Combat System, and the FAA’s Air Traffic Control systems. He holds a BS in Computer Science.

**Experience**

Rally Software (ReactJS front-end / Java Spring services / Oracle backend) Boulder, CO

*Senior Software Developer* 2014 – Present

• Helped Transition ExtJS components of SaaS product to ReactJS

• Created HTML5 based data visualization tool based on the PivotViewer platform

Digital Results Group (ReactJs Front end / C# WCF services / MSSQL & NOSQL Backend) Boston, MA

*Senior Software Developer: Active DoD Clearance: TS* 2012- 2014

• Created html5/js network topography management and visualization tool for DoD projects

• Developed html5/js based mobile platform for real-time ISR for Navy NAVAIR, Army PTDS

• Optimized back-end distributed network data propagation algorithms for a 10x speed increase

• Trained/mentored junior developers

• Designed architecture for large high performance single-page web app using ReactJS framework

• Performed vetting & performance testing of major MVC JS Frameworks: AngularJS, BasisJS, DurandalJS, EmberJS.

HNRG (C# ASP.NET with Js mix-in / C# Mid-tier/ MSSQL Backend) Boston, MA

*Software Developer*  2010 – 2011

• Developed Web UI Widgets for financial forecasting in ASP.NET/Javascript

• Created dynamic web-based SSRS report generator

SA Technologies (C# full stack ASP.NET & Silverlight) Carrollton, TX

*Software Developer* 2008- 2010

• Developed web based Situational Awareness evaluation tools for FLETC in WPF/Silverlight

• Developed SA tools for NASA JPL User Interfaces

.NET Contractor (C# full stack ASP.NET) Dallas, TX

*Contract Developer at various companies* 2005-2008

**Education**

University of Dallas Irving, TX

*Bachelor of Science* in Computer Science May 2005

**Skills**

Primary: C#, Javascript, Java, HTML5

Secondary: Lua, MVC Razor, XAML, C/C++, haXe

Frameworks & Libraries: ReactJS, RactiveJS, jquery/ui/mobile, requirejs, phaserjs, .Net 2.0 – 4.5, melonjs, nodejs, MS MVC3, ADO.NET Entity Framework, git, jenkins, jasmine, martyJS

IDEs: Eclipse, VS 2008-2013, WebStorm, IntelliJ

ASP.NET, WCF, WPF, Silverlight

Database: MySQL, MSSQL 2005-2008, LINQ, Entity Framework, MongoDB

**Fun Things I’ve Worked On Recently:**

**Project:**

RallyPivot

**Company:**

Rally Software

**Project Description**

Data visualization for SaaS product Oracle data store based on the old Silverlight PivotViewer control. Check out the video @: http://jbakerdev.github.io/

**Technologies Used**

• Javascript / HTML5 Canvas

**Project:**

Masters Of Scrum

**Company:**

Rally

**Project Description**

Edutainment app for teaching Agile methodologies. Check out the video @: http://jbakerdev.github.io/

**Technologies Used**

• Javascript / HTML5 Canvas

• PhaserJS

**Project:**

BusinessCatty

**Company:**

Rally

**Project Description**

Edutainment app for teaching CorporateSpeak. Check out the video @: http://jbakerdev.github.io/

**Technologies Used**

• ReactJS

• NodeJS

**Project:**

AgeonISR

**Company:**

Digital Results Group

**Project Description**

An ISR (Intelligence Surveillance Reconnaissance) application targeting mobile and desktop. When I began, the application was an ASP.NET solution with ad-hoc javascript add-ins, mostly using jQuery. This architecture scaled poorly for the level of performance and features that were required in the next phase of development (particularly the jQuery eventing and animation model), so I led an effort to convert the application to a more highly performant client side technology using no ASP.NET but only React JS. This decision was made after vetting and performance testing the other major contenders in the JS MVC space: AngularJS, DurandalJS, and EmberJS.

Besides this front end re-implementation I also did extensive work on the mid-tier service layer, specifically optimizing the network data flow algorithms. One of the core tenants of the application was that each node should synchronize its data sets with designated peers, which could be an arbitrary number of network hops away. The nearest neighbor model in place was very slow over multiple hops, and I was able to optimize a 1 minute synch time down to less than 10 seconds over three hops.

Check out the video @: <REDACTED>

OUTCOME: The AgeonISR system is actively deployed in theater operations with the US Army around the globe.

**Technologies Used**

• C# / WCF

• ReactJS / RequireJS

• MSSQL