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#### THUMBNAIL

## Full Stack/Front End Single Page Web Application Developer/Architect

- 10+ years SPA Web Application Development using AJAX/JSON APIs and various UI platforms
- 15+ years Web Application Development usually associated with Open Source Ecosystem Software Several SaaS projects.
- MSEE, back in the day did project and SW management, design and development of real-time embedded digital and RF hardware and firmware
- Extensive experience with Software and Product Development
- Always learning something new, even if it's something old
- Github Projects in: Golang, NodeJS, Preact
- Knowledge of: Container Deployment and Orchestration with Kubernetes
- Knowledge of: Akka. My Master's Thesis involved Data Flow and the Actor Model.
- See my Employment Blog at tetrainfotech.net for the long version

## **SKILL SETS**

- Current Backend: Modern (Async/Await) NodeJS JavaScript. Golang. Older: Java, C#, LotusScript
- Traditional Web UI: HTML/CSS/DOM/AJAX
- Current UI Platform: Preact. Older: AngularJS 1.x, EX-JS, JQuery
- Markup/Templating: XML/JSTL
- DBMS: SQL (Oracle, MySQL, SQL Server), NoSQL (MongoDB, Domino)
- Operating Systems: Windows, Linux, Mac
- IDEs: Visual Studio Code, IntelliJ, Visual Studio, Eclipse, Notepad++
- Automated Test: Selenium, Jasmine, Protractor

Bluetooth Low Energy API (see tetrainfotech.net/Sandbox).

- Source Control: Git, SVN, Perforce

### PROFESSIONAL EXPERIENCE

Tetra Information Technology Full Stack Web Developer Huntington Beach, CA 10/2018 – current Mercer Island WA,

08/2016 - 9/2018

**Responsibilities:** Find work where the people are a pleasure to work with and the tech stack is simple and powerful..

**Tasks:** Assess new technology stacks via small demonstration projects in Node, Preact and Go. Post them on my GitHub account: tetrainfo; host some of them on my website Sandbox. A take home interview APIDemo was coded and posted on git as a Node API Stack and as a single file Golang microservice. Later explored JSX by learning Preact (same syntax used as React) projects included a Concentration game. Finally, developed a Single File Design pattern using native JavaScript and the

**Environment: Golang, Modern JavaScript, Preact, Visual Studio Code** 

**Huron Click Web Application Developer** 

Seattle, WA

**Responsibilities:** Lead Software Developer for Hutch Grants System, front and backend. Implemented design specs in code. Wrote integration tests.

**Tasks:** Extensively customized an off the shelf Huron Research Software application to meet customer requirements, including Entities, Custom Views, SmartForms, Complex Projects, SF424 mapping, Activities and Notifications. Implemented an exhaustive Protractor automated test suite. Integrated with OKTA.

Environment: Click Grants 8.4, backend Jscript, C#, .Net Entity management, SQL Server, frontend jQuery, HTML5, CSS3, Protractor, Visual Studio, Visual Studio Code.

# Agilysys (W2 contract, Mainz Brady)

**Angular JS Web Application Developer** 

08/2015 - 03/2016 Bellevue, WA

**Responsibilities:** Lead UI Software Developer. Implemented stories.

**Tasks:** Rebuilt an existing public facing reservation widget in Angular JS and .Net MVC. Then rapidly prototyped an enterprise availability system with NodeJS reusing key parts of the earlier project. Heavy on Data Service Objects, Angular Directives, CSS animations, with some HTML5 features like SVG and Canvas. **Environment: Angular 1.X, JavaScript, Visual Studio, C#, HTML5, CSS3, Bootstrap, Git/SourceTree.** 

# **Lexipol (1099, Totem Technology)**

SPA/ExtJs Web Application Developer

06/2014 - 05/2015 Aliso Viejo, CA / Remote

**Responsibilities:** Contract UI Team Software Developer. Fixed bugs based on JIRA tickets.

**Tasks:** Maintenance/Features on an EXT-JS Single Page Web Application (SPA) used for Knowledge Management (F5 Spring Redis XDB/ESB). Did major refactoring to make the UI more obvious and intuitive, faster, etc

Environment: ExtJs 4.2, JavaScript, Java, IntelliJ, HTML5, CSS3, Git/SourceTree.

### **ConsultNet (W2 contract)**

Functional Architect / Web Application Developer

01/2014 - 05/2014 Irvine, CA

**Responsibilities:** Functional UI Architect, Lead UI Software Developer. Huge job, short timeline.

**Tasks:** Our team wrote a Single Page Web Application to track on-aircraft maintenance using AngularJS and Bootstrap. Wrote backend MVC in Java. The application had over 60 data models, yet it was live in 50 days. Wrote views consisting of HTML5, AngularJs 1.x, Bootstrap, CSS, organized as Play Scala Templates; also wrote AngularJs Controllers, Data Services, Route Stacks and Directives; authored MVC for many of the Json services in Java. Full stack.

Environment: JavaScript: AngularJs, Bootstrap, D3.js, JavaScript, Java, Playframework MVC, Deadbolt, Scala Templates, CSS, Ubuntu, Mac, Eclipse, Karma, Git, Firebug, MySQL, Cassandra, Hadoop, Git/SourceTree

Spireon (FTE)

**Senior Software Engineer** 

11/2012- 11/2013 Irvine, CA

**Responsibilities:** Senior UI Team Software Developer. Screened developers for hire as well.

**Tasks:** Real-time Big Data. Our team wrote a Single Page Web Application in EXT-JS for aftermarket vehicle telematics. Used by lenders to locate vehicles via embedded GPS/cell-network connection via the Application. Wrote front end MVC in JavaScript and backend MVC in Groovy.

Environment: MongoDB, Redis, MySQL, Groovy/Grails, Javascript, Ext-Js 4.1.x/jQuery, Git, Selenium, Jasmine, MySQL.

MaestroDev.com (FTE)

3/2012- 11/2012 El Segundo, CA

**Web Application UI Developer** 

Responsibilities: Lead UI Software Developer. Design and implement UI.

**Tasks:** Part of a small start-up creating an enterprise Cloud-based DevOps application. Maintained and upgraded UI for Maestro J2EE/Ruby application (not the public website). Added dynamic information features using jQuery. Resolved memory leak and performance issues. Simplified UI to follow best human-factors practices.

Environment: KANBAN, HTML, JSP, jQuery UI, Jetty, Netbeans, Git, Postgres, JIRA, Flowdock, Firebug

**Intuit San Diego (Integrated Associates)** 

6/2011-3/2012 San Diego, CA

Web UI Developer

**Responsibilities:** Contract UI Software Developer. Build UI to spec.

**Tasks:** Maintenance upgrades for Support segment of high-volume public facing J2EE website using JSP, JavaScript, JSON, AJAX, HTML and CSS3. Later, created a mobile-ready dynamic AJAX application using REST that consolidated knowledge-base, news, account searches and CRM information.

Environment: Agile Scrum, HTML, ¡Query UI, JBoss, ATG tag library, Eclipse, SVN, Rally, Firebug

**Green Acre Farms (1099 Tetra Information Technology)** 

5/2011-6/2011

**Web Application Developer** 

Toppenish, WA

**Responsibilities:** Primary Software Developer

**Tasks:** Migrated legacy Chemical Spray client/server program to mobile-browser-friendly web application (built backend REST services, backend reporting and front-end UI)

**Environment:** HTML, native JavaScript, AJAX, RESTful Web Service, NSF, Firebug

Qualcomm (1099 Cypress HCM)

2/2011-5/2011

Web UI Developer

San Diego, CA

**Responsibilities:** Senior UI Team Software Developer. Build UI to spec.

**Tasks:** Hand-coded web pages for an on-line mobile application marketplace using Jquery/JavaScript/JSON/REST. Included developing several novel UI component objects.

**Environment:** HTML, jQuery, Perforce, JIRA, notepad++

**Intuit San Diego (1099 Integrated Associates)** 

Web UI Developer

10/2010-2/2011 San Diego, CA Responsibilities: Contract UI Team Software Developer. Build UI to spec.

**Tasks:** Hand-coded web pages for secure credit card web site using JavaScript/JSON connecting via proxy to RESTFUL web services. Analyzed web site for performance improvement

**Environment:** Hand-coded application using HTML, jQuery, PhotoShop, Apache, Perforce, Team Track.

**Verizon Wireless (W2 contract AgreeYa Inc)** 

08/2009-09/2010

Web 2.0 JavaScript/JSTL Contract Developer at online store.

Irvine, CA

**Responsibilities:** Contract UI Team Software Developer. Build UI to spec.

**Tasks:** Coded dynamic web pages for high volume cross-domain commercial web site using JavaScript served by WebLogic/Akamai back-end.

**Environment:** Hand-coded HTML with Mootools JavaScript library, object/class oriented design, DHTML, PhotoShop, StarTeam, Accurev, Mercury, Firebug

**Self-Employed (Tetra) at Roy Farms** 

02/2008-8/2009 Moxee Washington

**Responsibilities:** Primary Software Developer. Gathered requirements, implemented client-server and ajax-based web apps.

**Tasks:** Wrote and maintained Customer-facing Web-based bonded wine storage inventory system. Wrote client/web application suite used to grow, harvest and process hops. Merged data from the growing cycle applications (field master, soil data, pest-tracking, chemical mixing/application storage, delivery, invoicing and royalty accounting).

**Responsibilities:** Primary Software Developer

Self-Employed (Tetra) at Trane Technology Center

08/2007-1/2008 La Crosse, Wisconsin

**Responsibilities:** Contract Software Developer

**Tasks:** Wrote and tested code on a firmware embedded browser client.

The Boeing Company (W2 Contract, Aviant Inc) Software Senior Web Application Developer 04/1999-07/2007 Anaheim, CA

#### Tasks:

Supplier Quality Management (system of record) 19 database Domino web application that worked offline using IBM DOLs technology. Initial architect of a web-enabled Domino-based Project Management Information System that has produced over 120 instances (application behavior is controlled by a configurable XML-rule based engine). Lead for a web-enabled proposal/project management generation tool for Commercial Aircraft Modification. Part of a team that rebuilt, reduced and migrated a 135 database application to a framework of 25 databases for the Missile Defense System. Created of protoForm platform to foster web application consistency and faster development.

Authored J5J Search system capable of searching, collating, mapping, reducing, and categorizing 20+ data sources containing huge amounts of data. Written as a Domino Java Agent (aka a servlet). Output to Web, Excel and PDF formats.

**Environment:** Java, Domino, DOLS, XML, XPATH, FTP, HTML, JavaScript, CSS, Formula-grid widgets, LotusScript, COM, and Visual Basic.

## **SUMMARY OF WORK PRIOR to 1999**

<u>1994-1999: Self-Employed. Cofounder: PDA Solutions.</u> Wrote a hand-held medical record system that produced audit-proof medical records and reduced the pay cycle from 180 days to 30 days. Included timekeeping, synchronization and a novel electronic medical record application (fieldChart) components. Later, ported app to C++ to work with a General Magic hand-held device.

Designed low-cost digital circuitry and coded EPROM resident 8051 firmware controller for a TV-FM converter. Included RF device drivers, touch and LCD device drivers.

1986-1994: Infotec Development. System Engineer, Hardware Developer, Software Developer, Lead SW Engineer and Program Manager. Invented and built a novel technology for measuring Instrument Landing System signals (**US Patent #5,323,332**) on MIL-T-28000 equipment. Designed and built production analog circuit card for Radar Altimeter. Lead a team that reverse engineered the software in a Mission Critical radar system controller – the originating aerospace company didn't believe it could be done: C, Assembly, Real Time OS in embedded firmware. Designed and deployed an innovative circuit card test application by integrating Nexpert Expert System and HyperCard.

<u>1985: CAST.</u> Software Developer. Managed a team that created some of the first GPS Navigation User Equipment software.

<u>1978-1984</u>: Hughes Aircraft. System Engineer/Technical Writer. Wrote technical manuals for HF radios, early LCD projectors and acoustic surveillance. Created the first automated software for estimating the cost and schedule for creation and maintenance of technical manuals. Embedded assembly language project using in-circuit emulator.

<u>1982</u>: Outstanding Master's Thesis Award. A detailed study of a 128 node Dataflow computer designed and analyzed down to the gate level. Side effect: purchased an Osborne Portable Computer to write the 132-page Thesis, starting my journey into software.

#### **EDUCATION:**

MSEE/Computers, California State University Long Beach BS Engineering, Washington State University MongoDB for Node.js Developers Bellevue College Extension Course 2015: Go lang