# T.J. Barbour

Experienced software developer looking for a remote position

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|---|---|---|---|
| **Experience** | 10 Years | | tjbarbour@gmail.com |
| **Main Skills** | C#, HTML, CSS, JavaScript | | 858 382 0360 |
| **Frameworks** | .net, ASP.net MVC, jQuery, Bootstrap, WCF | | 11429 Florindo Road |
| **Tools** | Visual Studio, TFS, NuGet | | San Diego CA 92127 |
| **Specializations** | UI, UX, Security, Multi-Tiered Design | | www.tjbarbour.com |

## EXPERIENCE

# ARRIS (Formerly Motorola)

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| NOV 2006 | Present 2015 | **8.5 Years** |

**Staff Software Engineer** — A lead developer involved in system design, implementation, and project management among other responsibilities in the "PKI Center" security department with a focus on User Interfaces and User Experience.

### Technology

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| **Web Front-End** | jQuery, Bootstrap, LESS |
| **Web Server** | ASP.net MVC & Web Forms, Razor templates, ASPX templates |
| **Native Front-End** | Windows Forms, Silverlight |
| **Back-End Services** | C#, .net, Windows Communication Foundation (WCF), XML/SOAP (ASMX) |
| **Business Layer** | AutoMapper, Windows Services, Log4Net |
| **Data Layer** | Entity Framework, LINQ to SQL, Microsoft SQL Server |
| **Other** | SafeNet Hardware Security Modules (HSM) |
| **Tools** | Visual Studio, NuGet, TFS, LINQ Pad, Paint.net MS Office, SharePoint |

### Responsibilities

**UX Lead**
- Lead an effort to define a unified style for all department web applications
- Investigated and prototyped web technologies
- Designed UI workflows using mockups
- Worked with management and requirements teams approve designs
- Selected quality graphics design resources
- Performed basic graphic creating and editing tasks

**Core Developer**
- Created helpful libraries to share code and reduce complexity
- Implemented core features of various systems for managing secure data
- Developed more than five ASP.net web applications
- Lead, participated in and encouraged code & design reviews
- Created unit and integration tests
- Called on to debug complex issues when others needed assistance
- Documented system design

**Team Leader**
- Performed Project Management, planning and coordination
- Made efforts to share useful knowledge with colleagues across projects
- Monitored and alerted operations teams of security vulnerabilities
- Active in system design process while encouraging others to participate
- Interviewed candidates from the intern to the senior level
- Mentored and trained others including new staff, interns and colleagues
- Delivered presentations on development topics and project updates
- Helped standardize commonly used libraries and tools across projects

### Projects

**Optimus Web Package** — Standardized and simplified web application development by integrating common libraries (ASP.net MVC, AutoMapper etc.) and establishing patterns and templates which removed the need for creating views (html) in most cases. This resulted in much leaner codebases that were easier to maintain.

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| **Mirage**<br>Web Package | Standardized department web design across most applications after a formal design evaluation process where visual standards were defined for typography, layout, colors, etc. Afterward, applicable web resources (Bootstrap, jQuery etc.) and style definitions (LESS) were encapsulated in this NuGet package. |
| **ULS**<br>Web Application<br>(link)* | Designed and implemented a web application performing software feature-licensing that integrated with a sales order system for license credit tracking, administrative functionality and reports as well as web services for automated license generation. |
| **Portal**<br>Web Application<br>*(in-progress)*<br>(link) | Designed and implemented a Single-Sign-On service that enabled multi-factor authentication using Time-Based One Time Passwords (RFC6238) and LDAP for our department websites. |
| **PKI Works**<br>Web Application<br>(link)* | Implemented a customer-facing web application and a separate administration website for certificate generation and certificate authority management that used Two-way SSL with a client USB token for authentication. |
| **PRiSM**<br>Web Application | Implemented a web application with a plug-in based custom code signature generation system which supported various secure hardware platforms. It also included delegated user management and contextual role-based authorization. |
| **Locksmith**<br>Service | Implemented a secure data pre-generation system that improved application performance by orders of magnitude. It included a client library, adapter layer for legacy applications, monitoring application, test client and a full suite of unit tests |
| **Other** | Participated in filing four patents, one approved (#20110047374)<br>Participated in technology, standards and process evaluation group to research and decide standard tools and libraries.<br>Commissioner of the Ultimate Frisbee lunchtime pick-up game, over 100 games played<br>*You might see an SSL certificate warning because our certificates are not in wide distribution |

# CUBIC Transportation Systems

| | JUN | NOV | 1.5 |
|---|---|---|---|
| | 2005 | 2006 | Years |

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|---|---|
| **Software Engineering Intern** | Software engineering intern while attending university. Contributed to code for portable devices used in transportation fare systems, interfaced with QA and worked with technical documentation. |

## Technology

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| **Mobile Application** | C++, MFC, PocketPC |
| **Tools** | Visual Studio 2003 |

## Responsibilities

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| **Developer** | Developed MFC C++ code for the Pocket PC / Windows CE application |
| **QA** | Regularly gave builds to QA, familiarized them with changes and discussed their findings to simplify the software development |
| **Documentation** | Clarified software functionality and changes with technical writers |

## Projects

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| **Hand Held Unit** | Contributed to the mobile application code which was used for checking smart card fares on light rail systems and for mobile printing, this was tested across several municipality transportation systems. |

# Tutoring Club

| | AUG 2004 | JAN 2005 | 6 Months |

**Tutor**
- Tutored students of all levels including K-12, College and adult in reading, writing, sciences and a focus on mathematics
- First tutor employed by this center, assisted with opening, closing, monitoring students' progress and promoting the business

# MESA Engineering Program

| | SEP 2003 | DEC 2003 | 3 Months |

**Semester Workshop Leader**
- Prepared and conducted a semi-weekly two hour Calculus I workshop
- Created worksheets and lesson plans for each workshop
- Summarized lecture material, answered student questions and prepared them for exams.

# Burger King

| | AUG 2000 | AUG 2002 | 2 Years |

**Manager**
- Responsible for running and closing the restaurant, verifying cash register tills, taking inventory and tracking daily sales with spreadsheets
- Conducted interviews, trained crew, translated English and Spanish between crew and management
- Earned position after starting as a crew member and gaining experience

## EDUCATION

# San Diego State University

| | SEP 2002 | DEC 2006 | GPA 3.94 |

**Bachelors of Science in Computer Engineering**
**Minor in Spanish**

**Accomplishments**
- Graduated Summa Cum Laude honors
- Member of Dean's list each semester

**Course Topics**
- C Programming, C++ OOP, C#
- Windows Programming
- Embedded Systems programming
- Electrical Engineering,
- Physics, Math

# University of California San Diego

| | SEP 2007 | JAN 2013 | GPA 3.3 |

**Coursework toward Masters in Computer Science**

**Accomplishments**
- Completed all required coursework for Master's program
- Contributed to Android application used in University Project "CitiSense"

**Course Topics**
- Software Engineering
- Ubiquitous Computing
- Human Computer Interactions
- Computer Graphics

## SKILLS LIST

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| .net | C# | Java | Microsoft Windows | SQL |
| ASP.net | C++ | JavaScript | Microsoft Office | SQL Server Management Studio |
| ASP.net MVC | Eclipse | jQuery | Node.js | Team Foundation Server |
| AutoMapper | Entity Framework | LINQPad | NuGet | Visual Studio |
| C | git | Linux / Ubuntu | Silverlight | WCF |

**Bilingual in English / Spanish**

## References available upon request