## **BRIAN WAPLINGTON**

BW Soft, Inc.

github.com/bwsoftinc

# Sr. / Principle Software and Systems Developer

Over 15 years of broad professional experience in software and systems design and development. A passionate and avid coder with ability to apply technical design and skills to solve business problems. Experienced at rapid pace development with superior degree of accuracy built upon experience, ability to anticipate problems, and attention to detail. Full stack knowledge with deep experience in software design and architecture, C#, javascript, T-SQL, devops models in startup and enterprise environments using SOA, n-tier, restful API, and microservice architectures. A business owner understanding the value of being a self-starter, self-directed and delivering results with a sense of urgency. Take initiative and ownership to develop solutions for needs of business and needs of customers. Able to communicate and develop a vision to navigate the high level of a business need as well as dig deep on the micro levels of the technical problem solving. Communicate and deliver results from inception to production readiness, while growing skills of team. Architect well tested solutions with focus on automation, performance and simplicity while meeting dynamic demands. Practiced in Scrum/Agile methodology, proficient in a variety of languages, tool sets and platforms. Continue to increase a diverse background, pick up new skills quickly, yet recognize what makes economic sense and still works irrespective of trendiness. A team player ready to collaborate and develop business solutions.

- TFS, SVN, GIT, VisualStudio
- CI/CD build release devops
- T-SQL, SSIS, SSMS, SSSB
- Entity Framework, CSLA
- COM, ActiveX, Native DLL's
- AppFabric, Redis Cache
- WinForms, WebForms
- ASP, VB6, VBA, ASP.Net
- IIS, Load balancing / proxy

#### **Experience includes:**

- NodeJS, Angular, jQuery
- C#, VB.Net, Ling, MVC
- MVVM, WebAPI, Swagger
- HTML5, AJAX, Knockout
- Bootstrap, CSS, Nuget
- WCF, XML, JSON, SOAP
- Win32, Windows API
- ActiveReports, OpenXML Reports, BIRT Reports

- OOP, Design Patterns
- Multi-Threading async
- Sockets, TCP
- Messaging / Queuing
- Logging / Splunk
- Saas, CRM Models
- C/C++, Java, MySQL
- PHP, Ruby, Python
- User Interface Design

### PROFESSIONAL EXPERIENCE:

#### BW Soft, Inc, San Diego CA

July 2018 to Current

Principal developer and architect of back end systems and webservices using .net core2.1, entity framework core, mysql running in linux docker containers for a startup project to provide a saas system of data integrations with the United States Department of Agriculture.

### Compass Group (compass-usa.com), Mobile AL, San Diego CA Apr 2012 to July 2018

Contract developer filling a principal / technical lead / architecture role Hands on in every aspect of "Webtrition.com" product used in all areas of business for meal planning, forecasting, recipe creation, recipe preparation, cost analysis, nutrient analysis, USDA and FDA compliance in foodservice sectors of healthcare, senior living, higher education, retail dining, public school systems, corporate dining, sporting venues. Work with Sr business stakeholders on multi-year initiative to architect, design, and develop new platform iteration to support an increasing user base, while integrating with and maintaining legacy systems as users are migrated. Principal developer tasked with re-designing and developing back end systems feeding internal and external Webtrition and Webtrition-powered systems to support scalability and expanding user base. Demonstrate skills and ability at highest

levels in organization to earn the confidence of others to design and implement new systems. Set pace with teams of UI and report developers consuming back end API's.

- Generally regarded as SME on the technical team of "Webtrition" business knowledge and all technical and programming details. Approached as the Go-To person on all issues large on small from Jr Developer to Sr Directors. Awarded and recognized 3 times across teams with certificates of achievements for exemplary performance.
- Re-designed and developed database schema of mission critical systems from scratch, outperforming legacy system in concurrency, contention, speed and resource efficiency while retaining existing features and adding additional business needs.
- Tuned indexes, write new stored procs, rewrite old stored procs, optimize old stored procs used in data maintenance to minimize job time and resource consumption and maximize resource availability for users.
- Architected, designed and implemented Restful internal web api and external web services as self hosted, owin, windows services from scratch. Determine needs of front end and integration partners from business requirements, design and develop api's to support requirements.
- Analyze and decide appropriate code regions for business intelligence implementations in the front end and back end, communicate and collaborate with front end team what their responsibilities would be and how to use the api's to achieve the business needs.
- Architected and implemented distributed caching solution as an abstraction layer with swappable cache provider implementations as shallow wrappers around different caching solutions: in memory, app fabric, service fabric, redis.
- Developed WCF wrappers around background processes to ease configuration and facilitate tuning of MS message queuing consuming processes through standardized config files.
- Proposed new business solutions to greatly reduce a manual admin process of tagging recipes via an automated criteria based "smart" tagging system.
- Implemented logging of all requests for dashboard usage metrics, and error monitoring.
- Utilized self-documenting api pages generated and updated continuously on builds with customized Swagger-ui.
- Fixed bugs in open source libraries Angular and DotNetCas to avert delays caused by 3<sup>rd</sup> party development schedules.
- Automated build and deploy, testing and code quality analysis, implemented CI and CD and best practices, build and deploy templates adopted by devops team for qa, ua, staging and production environments.
- Integrate new code with existing code base, refactor code for maintainability, optimize and performance tune existing code and stored procedures, write unit tests, test cases, integration tests, regression tests.
- Create reports writing and using T-SQL queries, stored procedures, Active Reports, OpenXML (MS Office file format), and Birt reporting frameworks. Create and use api's to feed reporting data to reporting frameworks.
- Designed and implemented multiple application authentication and user integration with active directory domain controllers and single sign on solutions for user login to multiple apps at once.
- Designed and developed OpenXML reporting framework and API with code generation from excel templates. Trained other developers on using API for report generation.
- Routinely selected to contribute to other projects and teams to get caught up, the team member approachable by all for ideas and willingness to help others and ability to apply standards, absorb deeper and more complete understandings of systems and software workings.

 Review code for performance, efficiency, business requirements, security and mentor junior developers.

## eLead CRM (eleadcrm.com), Niceville, FL

Jan 2011 to Mar 2012

Software developer in senior role, responsibilities included full stack development, technical design, implementation and integration of new features from business stakeholders and executive team in expansive CRM/Sales/Data-Mining SAAS site used by thousands of corporate and individually owned auto dealerships. Software comprised of website, windows desktop application, and WCF services to run and manage operations, inventory, sales, trade, loan, vehicle maintenance and customer relations. Custom software integration interfaces with 100's of partner, dealer and manufacturer web sites and databases in the auto industry. Interface with PBX phone systems with call records, duration and voice recordings of customer contact available through web interface. Grow skills of junior developers while helping troubleshoot and fix bugs.

- Realized and actualized business needs with very low defect rate by transforming high level and often times incomplete requirements into business ready software.
- Easily capture conceptual needs of business and needs of user and produce first-time-go
  prototypes to deliver features in UI layer in classic asp, asp.net c#, javascript, jquery and json.
   Mirrored functionality on C# Winforms client; developed new and updated existing business layer
  objects within and outside of CSLA data framework in C# and in T-SQL stored procedures.
- Provide development team value and reduce technical debt by streamlining and simplifying background processes running in VB6 to .Net, and updating classic ASP pages to ASP.Net.
- Enable additional revenue streams by designing and developing secure WCF web services for 3<sup>rd</sup> party and partner integrations

### Principal developer, BW Soft, Pensacola, FL

Aug 2009 to Mar 2011

Solutions architect and principle developer - deliver variety of software from proof of concept to final acceptance to meet customer's needs. Bid and won many government and private sector projects through vWorker.com where ranked in top <1% of around 300,000 developers.

- PDF API Library Mainstream exploit-proof custom implementation of PDF API for reading, rendering and image exporting API developed from scratch. Multi-phase project for reading, writing, editing, and converting PDF Files. Created as an API library in C# to parse file structure, support all internal file and object encodings of the pdf 1.4 format to extract, decode, edit or replace elements within PDF documents and convert entire PDF document to other document formats such as text, HTML, Word Document or Images. Able to completely replace the Adobe PDF Reader software for rendering to screen using .Net GDI+ wrappers while overcoming Adobe Reader exploit limitations and adding additional export, disassembly and conversion features.
- Customer / Vendor record management systems migration Update and modernize a
  nonworking database system and provide new frontend systems for vehicle parts and assemblies
  fabrication company. Migrated records system from legacy DBF to MySQL. Designed new query
  system to search, navigate, sort and display parts and assembly lists, customers, vendors, and
  orders using PHP.
- Real estate property management web applications Facilitate the ease in tracking rental
  property inventory for rental management. Provide key inventorying system to track and trace the
  whereabouts of keys to rental or sales properties among agents. Integrated with the DotNetNuke
  frame work (VB.Net); designed/developed four plugins to manage property inventory, client data,
  generate forms and email alerts, and track activities at properties using VB.Net, C# and ASP.Net.
- Network/Sockets/Protocol programming

- Provide revenue generating automation, by automating the uploading of advertising content to multiple tube sites simultaneously. Design and develop multi-threaded uploading automation web client. Implemented in C# Winforms, designed a custom scripting language and interpreter based on XML to script automation tasks for the automation client software.
- Maximize ad revenue in targeted advertising component written in C# winforms for bundling in other 3<sup>rd</sup> party windows software. Design a backend interface to all popular browsers to capture URL's being browsed and serve relevant ads based on ad provider api's. Developed web service for ad component in PHP/MySQL to gather relevant ads from variety of ad feeds, select best paying ad, and credit the 3<sup>rd</sup> party affiliate when ad is displayed or clicked in bundled ad software.
- Provide access though a normal http website transformation of a search engine running on a UDP backend protocol of by reverse engineering a largely undocumented EDonkey protocol, written in PHP with backend UDP client.
- Design and develop a multi-threaded, multisession telnet client and user interface in C# Winforms to store server ip's and command scripts to send to one or many servers with a single click.

#### Software components and utilities

- Facilitate windows software install/uninstall integrations with operating system features by designing and developing custom installer and uninstaller components.
- Allow the automatic creation of executable code "player" from shockwave flash files.
   Utility to set "play" options such as repeat or full screen and export executable code (.exe) as a standalone executable with the embedded flash content.
- Enable the editing and modification of already compiled executable resources by designing and developing an embedded resource editor for Packaged Executable format
- Provide quick view snapshots of rendered webpages as a thumbnail to web links as a web server component for easy integration to IIS to provide image previews of a web link to scrape and save to disk, or to serve over a WCF web service.
- Extend missing and needed features of Google's Ajax API's to randomize RSS feeds
- o Optimize for better user experience with lots of markers Google's maps marker clusterer

### U.S. Army - Active Duty Ft. Riley, KS

Apr 2005 to Aug 2009

Enlisted service in logistics, budget analysis, procurement, and purchasing as unit supply specialist. Challenged to take on additional technology roles developing software, maintaining databases, system/server administration and support. Honorably discharged from active duty August 2009, maintained Inactive Reserve status through March 2013.

#### Principle Software Developer/Database administrator

- Facilitated 1000's of families keeping abreast of their deployed soldiers' status by inheriting, fixing, upgrading and extending features in database system of deployed National Guard and Reserve soldiers though Ft. Riley MITT team deployment tracker database (SQL) and frontend user interface (VB6). Provided easy search and access capabilities to all of training, deployment, and personal records for each soldier deploying to Iraq and Afghanistan from Fort Riley. Software used by additional agencies such as Family Readiness Groups and Red-Cross.
- Saved operational time and personnel resource expenditure in mission operations duties
  of completing standardized mission reports. Developed a report template with mission
  ops Sergeant. Then develop a database of Iraqi intelligence and mission tracking (SQL)
  and keying and analysis software (C#/Winforms). Recorded mission objectives, dates,

vehicles, weapons, personnel, ammo, fuel, enemy contact and generated reports and statistical analysis of datapoints for future mission planning as standard input fields into the database. Then generate reports in Word according to template on mission reports for higher ups.

- Greatly improve traceability and trackability of property by automating the slow manual hand receipt process of signing over custody of property. Developed inventory management database (SQL) and software front-end (C#/Winforms). Tracked location and responsible parties of military property.
- Saved hours of downtime in training preparations by automating a slow manual process of arms room weapons checkout/checkin process. Compounded return of time spent on inventory and auditing process due built in trackability and traceability. Automated the filling out of forms about soldier and weapon possession by developing weaponry inventory, soldier, and checkout/checkin tracking database (SQL) and front end (C#/Winforms) to automate the operations of an arms room at the company level.

### IBM Boca Raton, FL

Jan-Mar 2005

Software developer and writer of interactive help/technical documentation for the alphaWorks division on a programming language in development, X+V (XML + Voice). Duties included extending the Rational Rose development environment for the X+V language and documentation on using new IDE tools for X+V development.

- Enabled expanded use of X+V programming language in IBM's development environment "Rational Rose" by developing and incorporating new coding tools and dialogs specific to development of X+V code in Rational Rose development environment.
- Facilitated user engagement in the new programming language in the Rational Rose environment by writing interactive help documentation and integrating into the Rational Rose development environment.

## RS&A Consulting San Diego, CA

Feb-Oct 2004

IT consulting company with diverse capabilities. Joined this team of consultants and brought and learned diverse skills in diverse environments. Developed and maintained web application for varieties of customers. Duties included client facing requirements gathering and end to end solution delivery.

- **E-Commerce Internet Applications -** Custom user account management, shopping carts and secure payment processing in ASP, Cold Fusion and PHP. Merchant gateways and Paypal.
- Win32 API Client/Server Applications User interface design, remote database, product key authentication, custom protocol over sockets using C++, visual studio MFC and COM.
- Web Applications Custom calendars, user management, usage tracking, search engines, rotating advertisements in ASP, Cold Fusion and PHP.

# Freelance Consultant/Web Developer San Diego, CA

Jan 2001 to Dec 2004

Designed, updated and maintained a wide variety of web applications on sites with diverse technology stacks. (full time and part time with school)

- Allow for customization of images by creating feature to take JPEG image uploads and dynamically resize, and crop within web application after upload.
- Secure website content to users by access and produced user control systems for login/account management and administration
- Provided ease of modification of webpage content by admin users by developing a customized content management and administration system over webpage text, layout and images.

- Provided admin capabilities of developing newsletter/promotional emails within the web application experience to track past promotions and receiving members.
- Facilitated ease of file upload and download with server via easy to use user interfaces
- Devised a visual calendar post-it board hybrid application to schedule, share and track events among site members. Developed concept in discussing requirements with product owner.
- Provided early social networking features as a site-wide roster and "community" application to post, share and view messages between site members.
- Promoted increased user involvement by developing a threaded discussion forum application for posting topics, comments and replies.
- Continue where other developers leave on in extended existing PHPNuke modules that provide 80% of features to save development time and cost.

### BakBone Software San Diego, CA

Aug 2000 to Jan 2001

A webmaster and application developer - responsible for creating a secure global employee portal website. Gathered requirements from users and management, developed, tested and deployed the systems to production. Trained additional web developer. Programming languages included ColdFusion, ASP, SQL (full time and part time with school)

- **User management application –** Provide security to website users and features by developing user management system to allow or deny user access to various web apps on intranet portal.
- Travel booking and expense reimbursement application Centralized the company's travel request, approval, and reimbursement systems to streamline the process for travelers, approvers and auditors by incorporating and designing a new front end to the system.
- Order Processing application Centralized all order processing with administrative capabilities to manage customer data, order placement and fulfillment, and order tracking.
- Software and documentation repository management application Expose a repository through simple to use web interface of official software build releases with accompanying versioned documentation.
- Centralized password management application Enable a unified and simplified process for
  users updating passwords on all company systems though a single web interface, scripted and
  propagated password changes to all servers, in environments before LDAP domain controllers.

## SearchPower, Inc. Carlsbad, CA

2000

Provided support and updates to website content and technical support of computers on a part-time basis while attending UCSD.

- **Webmaster** Delivered latest content to users by updating website content using HTML, CSS and Javascript.
- **Tech Support** Provided staff with technical support required for daily operations in hardware and software installation, network configuration, troubleshooting.

#### **EDUCATION:**

**University of California, San Diego – San Diego, California** (1998-2002)

192 credit hours towards B.S. in Computer Engineering

# **CERTIFICATIONS, AWARDS AND DISTINCTIONS:**

**Army Information Technology certifications** (Ft. Gordon, GA 2008-2009)

Information Assurance Security Officer Certification

# **BRIAN WAPLINGTON**

- Army G3 Computer Security Training
- Firewalls and VPN's
- Windows Operating systems and TCP/IP

Veteran of war preference, 5-point non-disabled (earned status in 2009)
Suicide prevention counselor (2008)

Deployed in support of Operation Iraqi Freedom (held interim secret clearance 2006-2007) Combat Lifesaver (2006)

**Distinguished Honor Graduate, Army advanced individual training** (2005) **Eagle Scout** (1997)