

# Shaun Luttin

Polyglot, multi-paradigm technical lead with a focus on building and securing large-scale distributed applications.

- [github.com/shaunluttin](https://github.com/shaunluttin)
- [linkedin.com/in/shaunluttin](https://linkedin.com/in/shaunluttin)
- [stackoverflow.com/users/1108891/shaun-luttin](https://stackoverflow.com/users/1108891/shaun-luttin)

## Experience

- Adhering to test-driven-development in NodeJS and .NET Core.
- Leveraging design patterns, functional programming, and clean code.
- Designing, developing and securing microservices in AWS/Azure/Google Cloud.
- Recommending/implementing standards-compliant OpenID Connect and OAuth security protocols.
- Coding with C#, TypeScript/JavaScript, Git, VS Code, Docker, and a Linux/Windows terminal.

### Technical Lead, Rubikon/CertiCraft, Aug 2018 to Present

- Designed and developed:
  - Front-end elements in ReactJS to access the back-end system.
  - NodeJS systems including third-party API integrations with Auth0, SendGrid, and Google Firebase Functions, Google Firebase Hosting, and Google Firestore.
  - Configured continuous deployment with Google Cloud Build to ensure tests pass before publishing microservices to Google Functions.
  - Configuration of NPM Scripts, Webpack, Babel (e.g. TC39 stage three features), Jest (e.g. environment management), ESLint/TSLint, Git Hooks (e.g. pre-push), and the TypeScript Compiler.
- Recommended, designed, and developed:
  - OpenAPI (previously Swagger) tools for testing, designing, and documenting our RESTful APIs.
  - Continuous deployment for the ReactJS client application and its NodeJS resource servers using Google Cloud Deploy.
  - OpenID Connect user management, authentication, and authorization for a ReactJS client app and its NodeJS resource servers.
  - Domain Driven Design, Command Query Responsibility Segregation, and Event Sourcing as design patterns for our complex, reporting-intensive business software.
- Mentored junior team members in clean software design; advocated for appropriate use of design patterns, functional programming, Git version control flows, test-driven development, and TypeScript/JavaScript.

### Software Developer, Palabra Apps, Apr 2018 to Aug 2018

- Integrated a convert-to-PDF feature into an existing Windows desktop application. Conversion supported multiple file types including MS Word/Excel, popular image formats, and rich/plain text.
- Rapidly learned the technologies necessary to implement a multiple tab PDF viewer and editor that supported document splitting, page rotation/deletion, and smooth scrolling.
- Created a user-interface that let end-users convert multiple files to PDF at once, view and manipulate those files in multiple tabs, add oncology-related metadata to the files, and batch import those files to MOSAIQ.
- The primary skills of this project were file system management, asynchronous programming, and researching how to use PDF manipulation libraries. The primary technologies were C#.NET with Windows Forms, ActiveX/COM interoperability, and Windows Communication Foundation.

### Senior Software Developer, Leavetown, 11 Dec 2017 to 09 Mar 2018

- Maintained the internal VB.NET Web Forms application and its underlying C#.NET services.
- This included adding new features, improving unit test coverage, and providing bug fixes to existing features.

## **Software Developer, BuildDirect, 12 Sep 2016 to 30 Nov 2017**

- Created the C#.NET Core project structure and the overarching design for a green-field API that has now made it to production.
- Recommended and lead the conversion of over 350 CoffeeScript files to TypeScript/JavaScript, introduced linting, fixed existing linting warnings, and contributed new features to an existing REST API that has now reached production.
- Planned, designed, and acted as the team lead for the NodeJS validation system that ensures incoming HTTP REST requests adhere to the business rules of the API's domain.
- For an existing NodeJS API, evaluated the current Client and End-User security model, trained colleagues in OAuth and OpenID Connect, and made a formal recommendation to management on how to move forward with OpenID Connect.
- Collaborated via Git, GitHub, code-reviews, Slack, JIRA, email, and company-wide calendars while writing additional libraries in C#.NET Core and TypeScript/JavaScript.
- Presented regularly at our internal Developer Guild meetings on topics including Design Patterns, C#.NET Core, async/await, OpenID Connect, and JavaScript modules.
- Coordinated the microservice environments among Auth0, AWS Lambda, Azure Functions, Azure Service Bus, and Azure API Management using Azure DevOps and Jenkins for deployment.

## **Founder / Principal / Software Developer, Bigfont, Sep 2012 to Aug 2016**

- Designed and built websites, Internet applications, Windows software, and connected devices.
- Provided technical support on Windows and Apple computers.
- Negotiated new contracts with small- and medium-sized businesses including Island Savings Credit Union, Envirolssues, and Country Grocer.
- Set up continuous deployment and environmental management with GitHub, Azure Kudu, and Azure App Services.

## **Software Developer, Aequilibrium, Oct 2015 to Sep 2017**

- Provided team augmentation for a six-month data import automation project involving skills in C#.NET, Git, Design Patterns, Microsoft Excel, and MongoDB; the team of approximately seven developers met the deadline and the code went into production.
- Designed and implemented the end-user authentication and also extended the existing data visualization features of an existing ecological data management system; provided professional skills in security, C#.NET, JavaScript, CSS, and HTML.
- Researched, designed, and implemented a custom Salesforce module to allow US government sites to accept payments from citizens; implemented the payment flow in JavaScript and APEX to the exact security specifications of the payment provider (First Data).

## **IT Support Specialist, CharityVillage, Aug 2011 to Jun 2012**

- Worked in C# and SQL to create, test and deploy approximately five custom modules which extend the Interprise Suite CRM system.
- Performed data cleansing, UML documentation, and SQL queries to facilitate the deletion of over 70,000 obsolete users and migration of the remainder to a new database.
- Handled 72 external technical problems and internally supported 14 staff.
- Installed and troubleshooted Interprise Suite CRM, Outlook, VMWare, and Windows Parallel.
- Diagnosed and fixed website bugs in CSS, HTML, and JavaScript.
- Produced a 20 page manual for future CharityVillage developers.

## **Web Developer, Lightmaker, Mar 2011 to May 2011**

- Used C#, SQL, JavaScript and HTML to limit the rate at which authenticated and anonymous users send SMS messages from the RESAAS website.
- Created a 'flag as inappropriate' system to let users flag images on the website and to let administrators remove images where necessary.

## **Web Developer, HealthChoices, Jun 2010 to Mar 2011**

- Designed and created the data tables, stored procedures, data-, business-, and presentation tiers to integrate SQL Server and C#.NET for ten DotNetNuke modules.
- Created a module to upload advertisements and to distribute them to dynamic web pages based on the appropriate region, health category, page position, and schedule.
- Developed a sitemap module to represent over 2,000 dynamically created pages in both XML for search engines and in HTML for end users.

# **Education**

## **Microsoft Learning**

- Developing ASP.NET 4.5 MVC Web Applications, Aug 2013
- Querying Microsoft SQL Server 2012, Feb 2013
- Programming in HTML5 with JavaScript and CSS3, Dec 2012
- Designing and Developing Web Applications Using .NET 4, May 2012
- WCF Development with .NET 4, Dec 2011
- Accessing Data with .NET 4, Jun 2011
- Web Applications Development with .NET 4, Mar 2011

## **British Columbia Institute of Technology**

- Certificate of Technology, Software Systems Development, Web Programming, 2009 to 2010, Grade: 91%
- Part-Time Studies, Computing & Information Technology, 2009, Grade: 96%

## **University of British Columbia**

- Bachelor of Human Kinetics, Interdisciplinary Studies, 1998 to 2007 Grade: 82%
- Activities and Societies: Member of the Varsity Outdoor Club; Research Assistant at the UBC Motor Learning and Control Lab

# **Publications**

- Learning From the Experts: Gaining Insights Into Best Practice During the Acquisition of Three Novel Motor Skills Research Quarterly for Exercise and Sport, Volume 82, Number 2, pp. 178-187(10) June 2011

# **Honors and Awards**

- Developer Technologies MVP, Microsoft, 2018
- Visual Studio and Developer Technologies MVP, Microsoft, 2017
- Make Web Not War Award - Top Open Source Contributor, Microsoft MVP Program, 2016
- Visual Studio and Developer Technologies MVP, Microsoft, 2016
- .NET MVP, Microsoft, Jan 2015