

Shaun Luttin

Polyglot, multi-paradigm technical lead with a focus on designing, developing, securing, deploying, and monitoring large-scale distributed applications.

github.com/shaunluttin | [linkedin.com/in/shaunluttin](https://www.linkedin.com/in/shaunluttin) | <https://stackoverflow.com/users/1108891>

Experience

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

Technical Lead, Rubikon/CertiCraft, Aug 2018 to Present

Intermediate Level Duties

- Advanced Backend Programming. Write code to specified outcomes and designs.
- Advanced Backend Design. Design modules within specified tools and architecture.

Senior Level Duties

- Within the boundaries of team projects:
- Advanced Backend Research. Follow industry trends and practices to choose appropriate tools.
- Advanced Backend Architecture. Maintain software scalability and velocity as the code-base grows.

Technical Lead Level Duties

- Advanced Technical Expert, Trainer, Advocate. Develop deep knowledge; share it with the team.
- Backend Project Ownership. Take responsibility for the overall quality of the backend system.
- Personal Project Management. Create, organize, prioritize and document project process.
- Intermediate DevOps. Contribute to development approaches that increase feature velocity.

Cultural Development Duties

- Management Consulting. Initiate practices that will make backend development more efficient.
- Conflict Resolution / Boundary Setting. Resolve conflicts. Set firm, respectful boundaries.

Architected, Designed, and Developed

- Microservices in NodeJS to expose commands and queries to front-end HTTP clients.
- Third-party API integrations with Auth0, SendGrid, and Google (Functions, Hosting, Blob Storage, Firestore DocumentDb).
- Continuous deployment with Google Cloud Build to ensure quality checks pass before publishing microservices.
- Automation with NPM Scripts, Webpack, Babel, Jest, ESLint, Git Hooks (e.g. pre-push), and the TypeScript Compiler.
- Domain models, commands, events, and services for Cannabis inventory management workflows.
- PDF and CSV report generation that leverage the same underlying domain models.
- Custom CQRS/ES infrastructure in Node JS that supports edit/undo operations.
- Over 2,500 TypeScript files (starting from an empty project) in 16 projects with over 25,000 tests.

Recommended, Architected, 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 for complex, reporting-intensive business software.
- Appropriate use of design patterns, functional programming, Git version control flows, test-driven development, and TypeScript.

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, EnviroIssues, 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 Enterprise 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 troubleshot Enterprise 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, 91%
- Part-Time Studies, Computing & Information Technology, 2009, 96%

University of British Columbia

- Bachelor of Human Kinetics, Interdisciplinary Studies, 1998 to 2007 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

- TypeScript Gold, Stackoverflow, 2020
- ASP.NET Core Gold, Stackoverflow 2019
- C# Gold, Stackoverflow, 2018
- Developer Technologies MVP, Microsoft, 2018
- Visual Studio and Developer Tech MVP, Microsoft, 2017
- Top Open Source Contributor, Microsoft MVP Program, 2016
- Visual Studio and Developer Tech MVP, Microsoft, 2016
- .NET MVP, Microsoft, Jan 2015

