

PROGRAMMING SKILLS

Languages: C#, Elixir, JavaScript, Python, SQL**Technologies:** GCP, Azure Angular, React, Docker**Development:** S/W Design Patterns, OO Modeling and Design, SOLID Principles, Continuous Integration

EXPERIENCE

• **Liazon** *Senior Software Engineer*

2015-2018

[web] BrightChoices: Online private benefits exchange for large and small businesses worldwide.

- Reduced 26 hours of department development costs by developing an easy-to-use, consistent, reproducible build pipeline written in **PowerShell**.
- Utilized **NServiceBus**, **MSMQ**, and messaging patterns to handle core business operations.
- Implemented **Windsor** facilities - logging, database transaction management, and event dispatching.
- Provided teams with **AngularJS** technical guidance and front-end best practices.
- Refactored components to use a **Windsor IoC** container for dependency management and simpler unit tests
- Implemented **SonarQube**, a code quality analysis tool, to help manage technical debt across the organization.
- Created **SpecFlow** integration tests to help put monolithic legacy code under test.
- Created **XUnit** component tests to solidify quoting, underwriting, and eligibility features.
- Collaborated with operations to migrate our **TFS** repository of 18,000 files to **Git**.

[web] Employee Search: Internal tool used by clients to manage employees on the BrightChoices platform.

- Designed from the ground up as a standalone service to reduce peak platform loads.
- Utilized to reduce employee search result load times from 16s to 48ms.
- Developed core search functionality on top of **ElasticSearch** using **Mono C#**.
- Utilized advanced **ElasticSearch** functionality including sharding, typeahead, and custom tokenizers.
- Implemented application as a **Docker** container for portability and easier deployments to **Azure**.
- Developed custom sync tool with **Dapper** to align “master” employee records. Refactored later to implement Elastic’s **LogStash**.
- Implemented a **RESTful** API using **NancyFX** for data access.
- Developed **MSMQ** event hooks to keep employee records up-to-date with the BrightChoices platform.
- Developed front-facing **SPA** with **ReactJS** to organize employee information.

[web] Insurance Inventory: Administration application used to manage insurance product configurations.

- Communicated closely with key stakeholders to develop a full functioning, self-contained application.
- Provided leadership to a team of 6 to build and deploy the application service.
- Created **UML** diagrams and **LaTeX** documents to facilitate communication between teams.
- Implemented back-end functionality on top of **Azure Service Fabric** with local bindings using **TopShelf**.
- Implemented **RESTful** APIs using **WebAPI** and **Dapper**.
- Refactored existing BrightChoices front-end code written in **Razor** to talk to the new application service.

[native] Ocelot Test Runner: Developed an **Electron** application to run **SpecFlow** integration tests for QEs.**[native] BrightChoices VR:** “Online” private benefits exchange for large and small businesses in virtual reality!

- Developed a rudimentary shopping experience in **Virtual Reality** with **Unity** and the **HTC Vive**.
- Collaborated with two other team members to build a working prototype in a two-day hackathon.

[web/native] **NextGen Platform**: Rewrite of the core software platform to support the next generation of X-Ray Solutions.

- Served as the leading technical specialist for **AngularJS** and other web technologies.
- Developed **il18n** system with **angular-translate**, **CLDR**, and **MomentJS**.
- Developed a build and deployment infrastructure using **npm** and **NodeJS** integrated into **MSBuild**.
- Established **AngularJS** design patterns and best practices.
- Developed kVp, MA, and time components used in X-Ray generators.
- Utilized **MassTransit** and **SignalR** to interface the web application directly with modular hardware.
- Developed an easy-to-use spinner control that could be applied to individual components.
- Collaborated with product teams to gather required functionality.
- Developed reusable configuration workflows for products on the platform.

[web] **Translations Manager**: Localization workflow application to manage the creation, maintenance, and processing of NextGen product translations.

- Designed from the ground up as a standalone application to decrease translation lead time.
- Managed localizations for 25 languages and over 125,000 translations with ease.
- Created exporters for various clients using (**XLIFF**, **XML**, **JSON**, and **CSV**)
- Implemented a back-end **RESTful** API using **WebAPI2** to access languages, translations, products, and users.
- Implemented a front-end **SPA** using **AngularJS** and **ui-grid**.
- Implemented full-text search functionality using **SQL** and **NHibernate**.
- Developed an entity based permissions system with **LINQ ExpressionTrees** to limit access to certain entities.
- Configured **IIS Web Deploy** to deploy to a local intranet. Later setup on **Jenkins CI** for automated deployments.

[native] **DRX Detector Applications**: Sample software to provide partnered vendors the ability to create third party applications to integrate with the DRX Detector.

- Utilized **.NET interop** to communicate with the **C/C++** DRX detector
- Developed a **C#** API facade to encapsulate the DRX detector API.
- Removed over 10,000 unnecessary lines of code in the preexisting **WinForms** project.

PROJECTS

[web] **eslint-plugin-bdd**: Implemented an **ESLint** plugin to lint **BDD** specs. Used by various projects in production.

[web] **code-null.com**: Developed a personal website using **Elixir** and **Google Firebase**.

[native] **EvE**: Developed reproducible development environments for Windows and Ubuntu. Utilized **Docker** and various software packages.

[native] **chocolatey-packages**: Implemented an **AU** repository to automatically create **Chocolatey** packages for software not packaged by their original maintainer.

EDUCATION AND CERTIFICATIONS

MCS D Programming in C#

2015

Monroe Community College *Rochester, NY*

2013-2014

- Developed a configurable Jeopardy game with questions, sound, and even animations using Java.
- Developed a time scheduling web application to help users resolve conflicting schedules. Most notably tries to avoid Hamiltonian cycles of overlapping time. Pitched to office registrar for integration with the scheduling system.

OTHER

- **Placed 2nd in the Synacor Hackathon.** *Buffalo, NY*

2017

- **Attended Abstractions.io conference.** *Pittsburgh, PA*

2017

- **Attended CodeMash conferences.** *Sandusky, OH*

2016-2017