# Spencer Cheney

Idaho Falls, ID · 208-206-1399 · <u>spencercheney@gmail.com</u> spencercheney.com · linkedin.com/in/spencer-cheney-b86381141

Software Engineer with four years of web development experience and multiple years of I.T. experience. Has taken projects from idea to production and also maintained and improved legacy code. Used I.T. knowledge to secure servers and networks to meet client's needs and government standards.

## **Professional Experience**

Information Systems Laboratories - Idaho Falls

11/2019 - 1/2024

#### **Projects**

R-Matrix - <a href="https://www.islinc.com/products/matrix">https://www.islinc.com/products/matrix</a>

Web Developer

- Maintained legacy code base while making improvements to enhance user interface and improve loading times
- Trained new intern and took over majority of web development tasks from project manager to become the lead developer
- Managed MS SQL Server database by updating data and table design to work with code updates
- Assisted in building a secure backend using Hibernate to connect to the database and Java frameworks and servlets to connect to the frontend
- Created a user friendly interface on the frontend by using a combination of Bootstrap and custom CSS styling, with JavaServer Pages and HTML outlining the pages, and Javascript getting data from the backend and updating the pages
- Added payment processing options through Authorize.net
- Created file upload, download, and file monitoring to allow admins to view and manage how much clients are uploading

Transcom - https://tcc.transcom.energy.gov/

Web Developer and I.T. Specialist

- Updated legacy code base to meet needs and requests of the client
- Identified needed database changes needed to keep up with code changes and builds delivered to the client
- Use JPQL to connect to the database and Java frameworks and servlets to connect to the frontend and generate downloadable PDF forms
- Created highly interactive user interfaces and forms using HTML to outline and template the pages and Javascript to retrieve the data from the backend and control the page
- Secure the application with password encryption using either PBKDF2-HMAC-SHA256 and SHA-512/256 algorithms, a randomly generate salt for each user, and a customizable number of iterations

- Updated the Group Policy to secure the client's Development, Test, and Production networks and all servers on the networks to meet CIS standards and reach a score of 98% on the current CIS benchmark
- Maintained and performed Windows server updates as updates come out

#### NRC Codes Licensing Dashboard

#### Web Developer

- Took the project from an idea by the client and worked with the project manager to build it up to be live and in production.
- Created LDAP login so users could keep their Windows username and password and use it for the application
- Set up Microsoft SQL Server database to store licensing and client information
- Build a secure backend using DWR and Hibernate, Java frameworks and user-friendly interface on the frontend using Vue.js and Bootstrap
- Enhanced loading times by analyzing transfer rates and switch single-threaded, problematic functions into multithreaded, cutting loading times by over 30 seconds

#### **WDS**

#### Build Manager and Java Research

- Created builds for all of the client's applications and documented them as moved from a state of development, test, and then deliver to the client
- Managed code versions, branches, and tags inside of Subversion version control to track code changes
- Researched possible ways to integrate DWR frameworks into most recent Java update now that DWR is no longer getting updated causing our applications to be insecure and out of date
- Looked into other Java framework options, such as Spring, that will require minimal effort implement and update into the current code stack
- Figured out how to adjust our frontend to work with Spring and what other options there are for frontend frameworks such as React, and existing HTML and Javascript
- Built a small demo version of some of the applications to test using Spring and React was possible with likely the most minimal effort of the options

### Freelance Experience

#### Razor's Edge Boxing Club - razorsedgeboxingclub.com

- Took an idea from a client and created an application to meet their needs
- Designed a layout and interface using existing logos and images from the client
- Edited logos and images using Affinity Designer to work within application frameworks
- Used React Javascript framework and JSX to create a single page application
- Create admin screen to upload images, captions, and posts in a blog style to keep user's and boxing clients updated with events going on
- Used Firebase platform to create a database to store image and post data and host the application

## Education

BYU Idaho - Rexburg, ID Bachelors of Computer Engineering

### Highlights

- Created programmable soda fountain to dispense a combination of soda and flavors as requested from user
- Created FPGA demo interface to test application in NASA space suit
- I.T. internship for the local city