

Draper, UT

[linkedin.com/in/richard-w-timpson](https://www.linkedin.com/in/richard-w-timpson)  
[github.com/richt3211](https://github.com/richt3211)

# Richard Timpson

(435) 251-7755

[richardtimpson80@gmail.com](mailto:richardtimpson80@gmail.com)  
[rwt-portfolio.herokuapp.com](http://rwt-portfolio.herokuapp.com)

## Education

Salt Lake City, UT	University of Utah	Expected Dec 2020
<ul style="list-style-type: none"><li>• <b>Degree:</b> Bachelor of Science in Computer Science (GPA: 3.94).</li><li>• <b>Relevant Coursework:</b> Discrete Structures, Software Practice I, Computer Organizations.</li></ul>		
Saint George, UT	Dixie State University	May 2018
<ul style="list-style-type: none"><li>• <b>Degree:</b> Associate of Science in General Studies (GPA: 3.95).</li><li>• <b>Relevant Coursework:</b> Object Oriented Programming, Data Structures &amp; Algorithms.</li></ul>		

## Employment

Software Engineer, Intern	Conversion Technologies	Aug 2018 – Present
<p>Conversion Technologies is small in-house company that manages the telephony and database of several call centers.</p> <ul style="list-style-type: none"><li>• Tripled the size of an in-house library used across several different web applications by engineering a standard header, table, and left menu components.</li><li>• Increased the front-end development production by 50% after joining a small development team and coordinating development between a database engineer and UI/UX designers using the front-end framework Angular.</li><li>• <u>Leveraged Knowledge</u> in Front-End Web Development, RESTful services, Single Page Application Design, TypeScript, JavaScript, HTML5, SCSS and CSS, Angular, and Version Control (using Git and GitHub).</li></ul>		

## Projects

**Personal Website:** [rwt-portfolio.herokuapp.com](http://rwt-portfolio.herokuapp.com)

**Multiplayer Space Wars Game** (<https://github.com/richt3211/CS-3500/tree/master/SpaceWars>)

The final project for my Software Practice course. Took 4 weeks from start to finish and was broken up into two parts. The majority of my contributions were in the networking and communication between client and server.

- Collaborated with one other partner and implemented the entire software engineering process, including problem analysis, engineering design, software implementation, debugging, and testing.
- Used C# and .NET framework to build both client and server-side applications using standard networking practices built on the TCP/IP stack.
- Constructed the server using multi-threading and asynchronous callback methods to handle up to 100 client connections and communicate the game engine physics to all clients at 60 messages a second.
- Optimized the view application to run up to 10 clients with explosion animations at 60 fps.
- Utilized: C#, .NET framework, Multi-threading and asynchronous callbacks, Visual Studio, and Sockets (TCP/IP).

**Spreadsheet Desktop Application** (<https://github.com/richt3211/CS-3500/tree/master/SpreadSheet>)

An amalgamation of projects for the first half of the semester from my Software Practice I course at the University of Utah.

- Engineered a spreadsheet application using C# and .NET window's form applications following standard MVC architecture patterns.
- Implemented a formula class with an infix expression evaluator, a dependency graph which was the data structure for tracking dependencies, a spreadsheet model, and a spreadsheet GUI.
- Optimized the view to ensure no latency when using the application by leveraging multi-threaded programming.
- Wrote and implemented Blackbox unit tests to ensure proper application functioning and exception handling.
- Utilized: C# and .NET framework, Visual Studio, Window's Form's Application, Unit Testing.

## Skills

**Languages:** (proficient): C#, TypeScript, JavaScript, HTML 5, SCSS (familiar): Java, C++, PHP.

**Tools/Frameworks:** (proficient): Angular, Vue.js, Git, .NET (familiar): Node.js, Laravel, React, MongoDB, SQL.