BRIAN LUKE MANNING
WEB DEVELOPER

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Projects

CheckMate (Ruby on Rails, React-Redux, PostgreSQL, HTML5, CSS3) | LIVE | GitHub

A single-page expense sharing web application inspired by Splitwise

- Active record query methods designed so all data fetching on page load for any page in the app makes at most two queries, resulting in an easily scalable product.
- Adding and deleting expenses and transactions to settle expenses triggers the creation, deletion, or update of associated expense shares.
- Allows users to dynamically show or hide details and comment CRUD API for each expense on each friend page, maintaining a sleek initial page rendering.

Jazz Ball (JavaScript, HTML5, CSS3) | LIVE | GitHub

A browser-based game inspired by JezzBall

- A dynamic area capture game where the player attempts to build walls while avoiding the balls bouncing around the playing field.
- Features an algorithm that recursively maps out all subdivisions of the playing field and automatically fills in any unoccupied subdivisions.

ActiveRecord Lite (Ruby, SQL) | GitHub

A light ORM inspired by Active Record

- Connects ruby classes to SQL based relational data tables.
- Allows users to define associations between model classes that can be used to generate SQL queries from oMap's API.
- Makes model classes to be searchable by their column info in the database.

Languages and Technology

Ruby	Ruby on Rails	JavaScript	jQuery	React	Redux	SQL
Git	HTML5	CSS3	MATLAB	SolidWorks	ANSYS	

Education

New York, NY   **App Academy**   **Summer 2016**

- Immersive 1000 hour full stack and web development course, acceptance rate < 3%

Pittsburgh, PA   **Carnegie Mellon University**   **Fall 2007 – Winter 2011**

- M.S. in Mechanical Engineering, December 2011. GPA: 3.67
- B.S. in Mechanical Engineering with a Minor in Music Technology, May 2011. GPA: 3.72

Work History

Senior Mechanical Engineer   **JENTEK Sensors, Inc.**   **Spring 2012-Summer 2016**

- Lead mechanical designer in adapting MWM-Array Non-Destructive Testing (NDT) technology for scanning of vessels and piping, including the successful inspection of the 1600 ft^2 internal surface of four hydrocracker units in just 1.5 days each during an oilfield services contract.
- Generated sales by performing field demonstrations and on-site engineering at several US military and commercial sites, as well as refineries and pipelines in China and Saudi Arabia.
- Enhanced capabilities for crack detection and sizing, corrosion detection and sizing, and stress estimation by implementing filtering algorithms for MWM-Array data using MATLAB.

Portfolio: www.alink2thepast.com **GITHUB:** ALink2ThePast
LINKEDIN: www.linkedin.com/in/alink2thepast