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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

- Wrote custom queries within models using ActiveRecord to minimize the number of queries made to the database in an effort to improve scalability.
- Controller methods that handle adding and deleting expenses and transactions trigger the creation, deletion, or update of associated expense shares in the SQL database.
- Allows users to dynamically show or hide details and comment CRUD interface for each expense on each friend page, maintaining a sleek initial page rendering.

PokéBounce (JavaScript, EaselJS, HTML5, CSS3) | **LIVE** | **GitHub**

A browser-based game inspired by JezzBall

- An area capture game where the player attempts to build walls while avoiding the balls bouncing off of each other and walls within the Canvas, using EaselJS to ball positions.
- Features an algorithm that recursively maps out all subdivisions of the playing field and automatically fills in any unoccupied subdivisions.

oMap (Ruby, SQL) | **GitHub**

A light-weight ORM to connect 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