

Josh Brickman

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LinkedIn: <https://www.linkedin.com/in/joshpbrickman/> | **GitHub:** <https://github.com/JPBrickhouse>
Portfolio: <https://jpbrickhouse.github.io/portfolio/>

Summary

Full Stack Web Developer, with extensive experience in creative problem solving, honed over nearly a decade in the building design industry. Strong project management and team leadership skills, developed through long-term collaboration with architects, contractors, and fellow structural engineers. Excited to leverage interdisciplinary knowledge and insight, and inspired to build the future through code.

Technical Skills

HTML, CSS, Javascript, jQuery, Responsive Design, MySQL & Sequelize, Security & Session Storage, MERN Stack (MongoDB, Express.js, React.js, Node.js), User Authentication, GitHub, Heroku

Projects

Hexagon Spelling Github: <https://github.com/JPBrickhouse/hexagon-spelling>
Deployed: <https://hexagon-spelling.herokuapp.com/>

- Solo project, built primarily with React and Javascript, and deployed on Heroku with the MERN stack
- A reverse-engineered version of the New York Times Spelling Bee game with a responsive interface

FitUp Github: <https://github.com/JPBrickhouse/FitUp>
Deployed: <http://project-two-2020.herokuapp.com/>

- Generate and save workouts from a randomized list of exercises, which are sourced from a custom API
- Application is built with Javascript, jQuery, MySQL & Sequelize, and features user authentication
- Served as project manager and back-end lead, ensuring that all routes correctly acquired data

Picniq Github: <https://github.com/JPBrickhouse/Picniq>
Deployed: <https://jpbrickhouse.github.io/Picniq/>

- Plan socially distanced picnics; this app discovers restaurants that offer delivery to your favorite parks
 - Application is built with Javascript and jQuery, calling to several APIs for restaurant and park data
 - Served as team lead, delegating tasks and ensuring that page content was accurately served to users
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Experience

Magnusson Klemencic Associates (MKA), Structural Engineer, 2013 to 2020

Worked as a senior design engineer alongside architects and contractors to ensure timely analysis, design, and construction of unique projects and structures, including the following:

- 150 N. Riverside, Chicago, IL - Performed site visits & construction review for 50-story tapering tower
 - Epic Systems, Verona, WI - Designed complex steel framing for a multi-campus corporate office park
 - 5th and Brazos, Austin TX - Dynamically optimized concrete structure for 34-story mixed-use tower
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Education

Northwestern University	<i>Certificate in Full Stack Web Development, 2020</i>
University of Illinois at Urbana-Champaign	<i>Master of Science, Structural Engineering, 2013</i>
University of Illinois at Urbana-Champaign	<i>Bachelor of Science, Civil Engineering, 2012</i>

Achievements

NASA and HeroX - Lunar Loo Challenge, First Prize Winner, 2020

Collaborated with three engineers to design the Translunar Hypercritical Repository 1 (THRONE).

This next-generation space toilet – intended for astronaut use in orbit, on the Moon, and beyond – was selected by NASA from more than 2000 submissions: <https://www.nasa.gov/feature/nasa-names-lunar-loo-challenge-winners/>