Stefan Cardenas

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Projects

Easy Streets | *Full Stack Developer -* *(Rails, React/Flux)*   **Live • GitHub**

Clone of StreetEasy.com, Single Page AJAX app w/ RESTful Rails API backend
- Enables dynamic location-based search using Google Maps API
- Uploads real estate pictures to Amazon S3 and preprocesses large images
- Uses composite bitmap indexing for fast database search

Lumines | Web *Developer* – *(JavaSript, jQuery, HTML5, Webpack)*   **Live • GitHub**

Browser-based game in the essence of the original Lumines game
- Applies HTML5 Canvas and requestAnimiationFrame() to render fluid visuals
- Custom acceleration and deceleration functions simulate blocks falling
- Achieves DRY, modular code through block and brick inheritance classes

DOMQuery | Web *Developer -* *(JavaScript)*   **GitHub**

Lightweight JavaScript library utilizing native Web API for efficient DOM interaction
- Streamlines HTML document traversal/manipulation and make seamless AJAX request

Skills

Python, Ruby, Rails, JavaScript, jQuery, SQL, Git, React.js, Flux, HTML5, CSS3, TDD, MATLAB, RSpec, Heroku.

Experience

RDG Consulting Engineers   **2013 - 2015**
Structural Engineer & Project Manager   New York, NY
- Created finite element models to quantitatively analyze the behavior of high-rise structures.
- Performed the geotechnical and structural calculations for NYC high-rise buildings.

MWH Global   **2011 - 2012**
Structural Engineering Intern   Chicago, IL
- Optimized the steel reinforcement in the lock walls of the Panama Canal expansion project resulting in up to a 20% reduction in steel used.
- Created finite element models in Abaqus to model the behavior of the lock-walls.

Education

App Academy   **Spring 2016**
Full Stack Web Development Course   New York City
- 12-week immersive full-stack web development bootcamp with <3% acceptance rate.
- Teaches full stack web development: Rails, SQL, JS, React, TDD, algorithms, and programming best practices

Columbia University   **2012 - 2013**
Master of Science in Engineering Mechanics & Computational Mechanics   New York, NY
GPA 3.5

University of Florida   **2007 - 2012**
Bachelor of Science in Civil Engineering   Gainesville, FL
GPA 3.7

📁 www.stefancardenas.tech   Github   LinkedIn