Jennifer Hamon

(850) 319-7853 • jen@hamon.io • github.com/jhamon

Independent Projects

To see my full portfolio, check out my personal site **hamon.io**

Meme Generator www.adoptme.me

Meme generator to virally increase visibility of cats seeking a new home.
Single-page Backbone app consuming RESTful Rails API.

- Retrieves cat listings from Petfinder.com's API and stores photos on AWS
- Cat-specific URLs are watermarked onto images.
- Images manipulated server-side using RMagick.
- Overrides Backbone's `Model#parse` method to rebuild Rails-like associations on the client.

Snake Arcade Game www.serpent.io

Classic game from Atari rebuilt for the browser.

- Implements pub-sub design pattern to maintain two-way data bindings.
- Each cell is a Backbone view listening for changes on the model layer and updating its DOM element accordingly.
- High scores persisted on Rails server.

Conway's Game of Life www.hamon.io/conway.js

Conway's Game of Life simulation written from scratch in object-oriented JavaScript.

- Uses HTML5's Canvas and Web Workers APIs.
- Handles >30,000 animated cells without crashing the browser by delegating expensive computations to a system-level process via Web Workers.
- Algorithm maintains array of recently changed cells and ignores the rest for 10x performance optimization.

Skills

Ruby, Rails, RSpec, JavaScript, Backbone.js, SQL, Python, Jasmine, git, HTML, CSS

Formal Education

California Institute of Technology   Pasadena, CA

M.S. in Geology, 2013. Research focus on paleomagnetism and the tectonic history of the Mojave Desert region. Paleomagnetic data analysis performed with Python (NumPy, matplotlib) and R.

Massachusetts Institute of Technology   Cambridge, MA

B.S. in Geosciences, 2010 (GPA: 4.3/5.0). Undergraduate thesis involved computer simulation of Florida hydrology and landscape evolution through time.