Jeffrey Taylor Smith

[github](#) | [linkedin](#) | [portfolio](#)

1061 Market St. #4
San Francisco, CA
jtsmith0107@gmail.com

Projects

[OmniPoll](#) | [Source](#)

Real-time polling application, great for surveying your audience or making group decisions

➢Implements live updating to all clients via websockets, so users can vote on questions simultaneously.

➢Uses clock processes on server to maintain client synchronicity to maintain a current question to be voted on by all clients.

➢Created custom SQL to cut out N + 1 queries for displaying completed polls on history page.

➢Uses custom routes and controller action to serve up the current question to clients.

Snake | [Source](#)

Classic game from Atari ported to the Browser

➢Snake movement operates as a queue of coordinates to limit rendering and computation.

➢Implemented game grid and movement with vector algebra.

Ruby Models | [Source](#)

Build my own ORM to gain better understanding of ActiveRecord

➢Heavy use of Ruby meta-programming to implement mass-assignment, search and association methods.

Arduino Spectrophotometer | [Source](#)

Affordable diagnostic tool to help patients in remote areas

➢Senior project to design a spectrometer that determines concentrations of solutions, particularly blood to diagnoses patients for diseases like diabetes, hyperbilirubinemia, and anemia

➢Cheaper than the alternatives by factor of 100.

➢Created software interface with a display, touchscreen, and a light sensor within processing and memory limit.

➢Increased battery life by minimizing computation for signal acquisition with a system specific algorithm.

➢Placed 3rd out of 25 at interdepartmental engineering competition.

Skills

Ruby, Rails, Javascript, Backbone, jQuery, HTML, CSS, git, RSPEC, C/C++, Matlab

Education

Texas A&M University, College Station, TX May 2014

BS Biomedical Engineering GPA: 3.22

Curriculum Highlights: Data Structures and Algorithms, Linear Algebra, Digital Logic, Microprocessor System Design, Digital Signal Processing