Portfolio

StreetEZ (Live | Source)

May 2014

- Cloned the residential real estate website streateasy.com using Ruby on Rails, Javascript, and Backbone.js
- Implemented dynamically updating map using Mapbox Javascript API, solved fixed floating issue when user scrolls using custom CSS, added map re-centering when hovering over a listing to improve UX
- Used UJS and Backbone.js to improve responsiveness when updating map and user messages
- Solved constrained search using nested forms and custom chained SQL queries
- Created a polymorphic Notifications model to alert users to their interactions with the app and each other
- Integrated Twilio for text message confirmation upon signup

Asteroids.js (Live | Source)

April 2014

- Recreated the classic arcade game Asteroids in browser with JavaScript and HTML5 Canvas
- Implemented wrap-around to allow asteroids and the ship to move through the sides of the game map

Active Record Lite (Source)

March 2014

- Cloned the basic ORM features of ActiveRecord with heavy use of metaprogramming
- Implemented mass-assignment, querying, and association methods

Technical Skills

Ruby, Rails, Javascript, jQuery, Backbone.js, SQL, Git, HTML, CSS, Visual Basic

Work Experience

Vice President, ETF Trading, Jefferies, LLC

January 2010 – March 2014

- Managed the International, Domestic, and Commodity ETF businesses, returning them to profitability in the first year and generating more than 80% of the ETF business' bottom line
- Wrote models and analytic tools in Visual Basic / Excel in order to improve market making capabilities and risk management both during and outside of market hours
- Managed technology and operations teams for the build out and implementation of new technology initiatives and improvements to the trading system
- Coordinated efforts between New Business Committee as well as US, European, and Asian technology and
 operations teams in order to expand the firm's capabilities in International ETF trading and risk management
- Provided value added market color on various asset classes to help build brand awareness

Equity Derivatives Strategist, Jefferies, LLC

July 2009 – December 2009

· Consulted with clients, providing analysis of options strategies based on fundamental and quantitative data

Portfolio Strategy Developer, QED Benchmark

Summer 2007

 Analyzed past economic trend data, industry metrics, and market metrics in order to develop investment screens from start to completion using Excel and Visual Basic

Education

University of Pennsylvania, Philadelphia, PA

2005 - 2009

School of Engineering and Applied Science

B.S.E. in Bioengineering & Minor in Economics

Coursework: Calculus: I-IV, Physics: E&M and Quantum, Computation Neuroscience, Bioengineering Systems, Advanced Chemistry, Biotransport, Statistics, Negotiations, Micro & Macro Economics, Corporate Finance

Leadership Activities

Mentor, Minds Matter

2011 - Present

 Work with high achieving high school students from low income families in a program focused on getting the students into competitive summer programs and universities

Treasurer, Hexagon Engineering Honor Society

2008 – 2009

• Managed budget of over \$5,000 dedicated to event planning and promotion for the organization

Undergraduate Rep., Provost's Board for Academic Planning and Budget

2007 - 2009

• Provided advice to the university's administration on short and long-term resource allocation

Member, Tau Epsilon Phi Fraternity

2006 - 2009

• Vice President: Oversaw all committees and fraternity events with attention to managing the budget

Personal Profile

• Huge Lakers fan, play basketball weekly, run half marathons, fitness nut