Ryan Mark

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Portfolio | **LinkedIn** | **Github**

EXPERTISE

Ruby, Rails, Sinatra, RSpec, JavaScript, jQuery, React, Redux, HTML5, CSS3, PostgreSQL, Git, AWS, Heroku

EDUCATION

App Academy, Mar-Jun 2018
2000 hour coding intensive program, <3% acceptance rate

Northwestern University - Evanston, IL, 2014
 BA - Economics, Math
 Course Highlights - Graph Theory, Linear Algebra
  Number Theory, Real Analysis, Econometrics

EXPERIENCE

Data Analyst   *NPD Group*
Jun 2016 - Mar 2018, *Port Washington, NY*
- Monitored Tech industry sales trends via custom and pre-built database pulls, resolved inaccuracies, and ultimately delivered consistent client satisfaction for data across assigned sectors
- Introduced string matching algorithm to identify likely mismatches in database and distributed results in weekly reports to team members
- Coordinated extensively with teammates to develop Sharepoint site that stores documentation regarding their current projects, responsibilities, and the nuances of the sectors they oversee

Regional Sales Associate   *AXA Distributors*
Nov 2014 - Jun 2016, *Jersey City, NJ*
- Developed VBA program that captures new business opportunities from a large dataset and compiles them into a formatted report, saving coworkers an hour per week in manual data entry
- Managed a territory of 500 financial advisors to generate $20m in new variable annuity contracts per month, exceeding production targets
- Conducted presentations and meetings with advisors to help position AXA products within their clients' investment strategy

Global Supply Chain Intern   *W.W. Grainger, Inc*
Jul 2013 - Sep 2013, *Lake Forest, IL*
- Conducted competitive research analysis and customer surveys to determine prioritization of potential value-added services
- Built Sharepoint site used as the primary tracking resource for projects undertaken in Grainger's international supply chains

PORTFOLIO

Soundstorm   **Live Site** | **Github**
Single-page Soundcloud-inspired web app built with Rails backend and React/Redux frontend

- Leverages AWS S3 and Paperclip for audio and image uploads, minimizing server-side storage footprint and facilitating graceful scaling
- Seamlessly integrates the main audio player, waveforms and play/pause buttons through the Redux state, allowing for continuous playback across the site
- Fetches track lists dynamically from the database based on user navigation, supplying filters through AJAX requests and re-using the React track list component for DRY code

Patzer   **Live Site** | **Github**
Chess engine built in JavaScript

- jQuery-based UI enables player movements through dragging and dropping pieces, and renders animation for AI moves
- Utilizes bitboard representation for low memory footprint and efficient board operations
- AI move search implements negamax algorithm with alpha-beta pruning inside a time-limited iterative deepening framework
- Further search enhancements include transposition tables, killer move heuristic, and quiescence search

Free Samples   **Live Site** | **Github**
JavaScript application for interactively visualizing random sampling algorithms

- Includes demos and explanations for Poisson Disc, Mitch's Best Candidate, Uniform, and Uniform Random sampling algorithms
- Extracts pixel data from an original image for each randomly sampled point and re-renders it with different effects, including voronoi mosaic pattern generated with d3.js
- Features optional user image upload to be re-rendered with different sampling/visualization effects