

WON-BAE SEO

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EDUCATION

APP ACADEMY, NEW YORK, NY

May 2018-Aug 2018

- Rigorous 1000-hour software development course with <3% acceptance rate.
- Full-stack web development: Rails, SQL, JS, React, TDD, algorithms, design patterns, and best practices.
- Topics include: TDD, scalability, algorithms, OOP, coding style, REST, security, single-page apps, and web development.

MICHIGAN STATE UNIVERSITY, EAST LANSING, MI

Aug 2013-May 2017

Bachelor of Science, Electrical Engineering

- Concentration in Biomedical Engineering
- GPA: 3.80, Graduated With Honor
- Courses included : MATLAB Programming, Analog and Discrete Signal Processing, Control Systems, Electromagnetic Waves, Statistics, SPICE Programming and AC/DC Circuit Analysis.

PROJECTS

JOYREADS

Summer 2018

SINGLE PAGE APP INSPIRED BY GOODREADS

- Features a Ruby on Rails/SQL backend following MVC and RESTful conventions, a JS frontend utilizing React/Redux.
- Realtime changing of state that does not require the constant refreshes that Goodreads does in order to operate through the use of properly maintained Redux State.
- Minimized loading times and time complexity of state changes, generated custom SQL queries with ActiveRecord to eager-load data and quickly populate frontend state.
- Keeps track of visited users and books to pre-fill React Component state, for best possible User Experience

BLOKIFY

Summer 2018

- A JS/HTML/CSS/Canvas built browser game, based on the popular sliding 15-puzzle with a twist.
- Features 3X3 and 4X4 layouts, with fully implemented sound effects and no unsolvable board states, made possible through checking a state's inversion sum.
- Take a "selfie" through the webcam stream, accessed by JS's getUserMedia function to snap a photo and use it as the puzzle image.

CHESS

Summer 2018

- A fully featured rendition of Chess playable through the terminal coded in Ruby.
- Features a simple AI player, and obscure moves such as En Passant.
- Uses cursor selection to move pieces and notifies the player of invalid moves.

MATLAB VOICE RECOGNITION

Spring 2017

- Coded a Matlab program that would match a voice to its owner using a database of words
- Utilized high level mathematical concepts such as Discrete Fourier Transforms
- Learned to consider MFCC coefficients and their relationship with the human ear in designing the program so it would give human-level recognition.

SKILLS

- Ruby, Rails, Rspec, JavaScript, jQuery, React, Redux, SQL, Git, HTML5, CSS3, MATLAB, PSPICE.
- Developing and Manufacturing a PCB board layout.
- Korean - speaking, reading and writing.