NOAH LEVIN

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SKILLS

React.js, Redux, Ruby on Rails, JavaScript, Node.js, Express, PostgreSQL, MongoDB, GraphQL, HTML5, CSS3

PROJECTS

Whiskr Live Site | Github

Photo-sharing site for cat lovers (MERN stack: Mongo, Express, React Hooks, Node; Docker; Apollo GraphQL)

- Designed custom middleware (pre/post hooks) for Mongoose ODM to maintain data integrity among associated collections.
- Engineered logic in GraphQL resolver to filter photos alternatively by search query, photographer, recency, or popularity.
- Employed event listeners, pagination, and Lodash debounce to implement "infinite scroll" for photo browsing.
- Created an algorithm to organize photos into rows of even width but subtly varying height and varying numbers of photos in order to generate an attractive tiled display without cropping or distorting photos.
- Wrote Docker and docker-compose files for deployment to the Heroku Container Registry.

Whelp Live Site | Github

Crowd-sourced reviews of dog-related businesses (MERN stack: Mongo, Express, React, Node; Google Maps API)

- Created custom MongoDB query combining the aggregation pipeline and full-text search in order to find the businesses whose reviews are most relevant to user input.
- Integrated Google Maps API to filter search results by location and display them with custom map markers.
- Employed event listeners and Axios requests to reload search results when the map is repositioned.

Bubble Blaster Live Site | Github

Retro, arcade-style game (HTML5 Canvas, JavaScript)

- Adhered to best practices of object oriented programming to distribute slices of game data among appropriate classes, thereby producing maintainable, modular, and extensible code.
- Implemented gravity and collision algorithms to create physically realistic, fully tunable interactions among game objects.
- Employed HTML5 Canvas and JavaScript Web API in order to animate sprites and bring to life a colorful, retro game world.

Heap Overrun Live Site | Github

Question and answer site inspired by Stack Overflow (Ruby on Rails, PostgreSQL, React)

- Reduced required tables in database by 20% through the use of polymorphic associations for votes and comments.
- Eliminated N+1 queries and streamlined database access by eager-loading associated records.
- Implemented full-text search on questions' titles and bodies with a Generalized Inverted Index (GIN).
- Employed AJAX requests to autosuggest popular question tags as the user inputs text.
- Integrated Feednami API to load RSS feed and display currently popular questions from around the Stack Exchange network.

EXPERIENCE

Physics Instructor

The Hun School of Princeton, August 2018 - July 2019

- Taught four sections of Physics with a hands-on, student-centered pedagogy that prioritized discovery over rote learning.
- Designed and conducted a mini-mester course on the science and engineering of thrill rides as part of a three teacher team.
- Completed voluntary, yearlong SEED (Seeking Educational Equity and Diversity) training.
- Advised Gender and Sexuality Alliance, mentored six sophomore students, and coached Winter Squash and Spring Track.

Physics and Latin Instructor

Groton School, August 2011 - July 2013

- Taught introductory Latin and all levels of high school physics, including AP Physics C and an elective on modern physics.
- Advised independent projects on quantum mechanics, metal detectors, and Nietzsche.
- Coached sports (cross-country, squash, tennis); served as advisor and as dorm affiliate.

EDUCATION

App Academy - Intensive 1,000 hour course in software development with focus on full stack web development (Fall/Winter 2019) **Princeton University -** *MA - Classics* (Spring 2018)

Brown University - BA - Physics, Classics: Greek and Latin (Spring 2011)