Melanie Davila

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Projects

midSoul | *PostgreSQL, React.js/Redux, Rails*   **Live** ● **GitHub**

A fullstack, single-page application for runners, inspired by MapMyRun

- ❑ Optimizes database storage of geographic coordinates representing running routes via encoded polyline algorithm available through Google Maps API
- ❑ Facilitates aggregation of activity feed items using a polymorphic FeedItem model and custom SQL queries

(Re)Mission Possible | *Javascript, Easel.js*   **Live** ● **GitHub**

A browser-based antibody-flinging, cancer butt-kicking game

- ❑ Integrates DRY, object-oriented design principles
- ❑ Optimizes drawing the HTML5 canvas element by solely redrawing objects that changed with the Easel.js library

Dynamic Record | *SQL, Ruby*   **Live** ● **GitHub**

An ORM inspired by the ActiveRecord pattern of Ruby on Rails

- ❑ Incorporates metaprogramming techniques and SQL to facilitate database queries
- ❑ Implements object-relational-mapping and provides seamless single and multi-step associations

Skills

Ruby

Ruby on Rails

JavaScript

jQuery

React.js

Redux

SQL

Git

HTML

CSS

Education & Training

App Academy   **December 2016-March 2017**

Rigorous full stack web development course with ~3% acceptance rate   New York, NY

Rutgers University   **September 2009 - May 2013**

Bachelor of Arts in Genetics   New Brunswick, NJ

GPA 3.73, Magna Cum Laude, *Curriculum Highlights:* Statistics for Research

Work Experience

Memorial Sloan Kettering Cancer Center   **October 2014 - October 2016**

Research Study Assistant II   New York, NY

- ❑ Managed over 300 pediatric oncology clinical trial enrollments and performed analyses of corresponding data, facilitating peer-reviewed publications and contributing to outstanding performance during audits

RUCDR Infinite Biologics   **December 2013-June 2014**

Laboratory/Technical Assistant   Piscataway, NJ

- ❑ Managed thousands of biospecimens and performed SNP analyses on DNA samples, aiding in successful fulfillment of biospecimen and data requests from researchers

Volunteer Experience

Casa do Caminho   **June 2013-December 2013**

Volunteer Educator   Xerém, Brazil

- ❑ Performed 3-5 weekly twenty-four hour shifts to supervise orphans and at-risk youth
- ❑ Designed and implemented science and foreign language education initiatives, exposing youth and community members to subjects not otherwise taught in the local region

www.melaniedavila.com   www.github.com/melaniedavila   www.linkedin.com/in/melaniedavila/