Vishak Visvanathan







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portfolio github

PROJECTS

Sitbit Dashboard (Rails, Backbone.js, Vega.js) | live | github

Health tracking & data visualization app inspired by Fitbit Dashboard.

- Utilizes modified Backbone composite view pattern to chart health data in a responsive single-page app.
- Pioneered integration of Backbone view patterns with Vega.js graphing library.
- Maximized chart render speed through reconciliation of server-side and client-side data handling.

Rails Lite + ActiveRecord Lite (Ruby) | github

Lightweight version of Ruby-on-Rails with custom ActiveRecord ORM implementation.

- Replicates Rails controller and router object classes, including controller methods.
- Stores and persists serialized session data in WEBrick cookie.
- Fully featured ORM associations and table modification methods.

TRON (Javascript, HTML5, CSS3) | live | github

Javascript game based on the 1980's cult classic TRON.

- AI calculates optimal re-route upon collision through 'sweep area' method.
- Features modern, themed user interface; single-player and multiplayer modes.

SKILLS HTML **TDD** Ruby Javascript Backbone Rails jQuery SQL CSS git

EXPERIENCE Jr. Mechanical Engineer (2013 - 2014)

Science Applications International Corporation (SAIC)

- Standardized protocol for assembly tracking to increase design team productivity.
- Initiated and executed comprehensive mechanical analysis and documentation of mission-critical network racks (Space and Naval Warfare Systems).

Assistant Scientist (2013 - 2014)

Enviroapplications

- Supported engineering operations with regulatory research, drafting, and emissions analysis.
- Designed 50+ solar PV systems for commercial and residential installations.

EDUCATION

App Academy (2015)

Immersive software and web development course • acceptance rate < 3%

University of California, San Diego (2013)

BS Environmental Engineering

Relevant Coursework: Engineering Statistics, Differential Equations, Numerical Analysis