Paul Richter

JavaScript Developer

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SUMMARY

JavaScript developer with a background in scientific computing; interested in clean code and tasty problems.

RELEVANT EXPERIENCE

Edison Pharmaceuticals Mountain View, CA

March 2016 - Present

Front-End Web Developer

- Transitioned team from Angular to React by architecting modern React/Redux app from ground-up, incorporating normalizr/reselect, ES6 generators, react-hot-loader, and mocha/chia
- Designed full workflow and data management systems for scientists to conduct experiments on 4 machines
- Designed/built a UI for managing compound inventory that translates the physical system (freezers, shelves, racks, drawers, trays, and vials) as a web interface to track lifecycle for 3000+ compounds
- Developed universal React component for editing sample plates containing 1000+ samples with arbitrary data
- Wrote Redux middleware and React HOCs to enable state persistence, debouncing, logging, and rendering optimization
- Designed and prototyped APIs using Node.js to interface PostgreSQL

Coding House Fremont, CA

October 2015 - March 2016

Freelance Web Developer / JavaScript Tutor

- Built Web Apps 70+ hrs/week using various frameworks/APIs
- Reviewed student code with advice on readability, coding style, and UI/UX improvements
- Tutored class of 26 students on various JavaScript technologies including AngularJS, React, Node.js, MongoDB, jQuery, etc.

Cornell Environmental Fluid Mechanics Ithaca, NY

July 2010 - August 2011

Computational Fluid Dynamics Researcher

- Modified and ran numerical simulations of internal gravity waves using spectral methods and Legendre psuedo-spectral methods in Fortran 90
- Analyzed large data sets and created dynamic data visualizations of internal waves in MATLAB
- Presented research at annual American Physical Society fluid dynamics conference in Long Beach
- Collaborated with research advisor and PhD students

EDUCATION

Cornell University Ithaca, NY

May 2011

BS Civil Engineering

Honors: Dean's List, ELI Research Grant, APS Division of Fluid Dynamics Travel Award

Courses: Advanced Numerical Methods, Engineering Computation, Stochastic Processes, Linear Algebra

TECHNICAL SKILLS

- React/Redux - HTML 5 - Webpack - Git - MATLAB

- Angular - CSS3 - Gulp - Mocha/TDD - Python (elementary) - jQuery - Node.js - ES 6 - Unix/Bash - SQL (elementary)

OTHER EXPERIENCE

Dec 2014 - Aug 2015: Worked as a furniture builder/designer at small company, Dejong & Co. (see paulichter.us)
Feb 2013 - Oct 2014: Worked as Bike Mechanic / Delivery Fleet Manager at restaurant chain Greenleaf Chop Shop
Oct 2011 - Dec 2012: Crossed the US in a zero-cost urban survival journey living in a truck; volunteered at Boulder Food Rescue, Food Not Bombs, and Community Cycles

INTERESTS Biking, chess, riddles, really spicy hot sauce