

Paul Richter

JavaScript Developer

mpr75@cornell.edu | 213.800.3198 | paulrichter.co | github.com/paulgoblin

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 - April 2017

Front-End 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 7000+ compounds
- Wrote Redux middleware and React HOCs to enable state persistence, debouncing, logging, and rendering optimization
- Prototyped APIs using Node.js to interface PostgreSQL
- Designed and built APIs for mass spectrometry workflow using Flask/SQLAlchemy/PostgreSQL in Docker environment

Coding House Fremont, CA

October 2015 - March 2016

Freelance Developer / JavaScript Tutor

- Built Web Apps 70+ hrs/week using various frameworks/APIs
- Tutored class of 26 students on various JavaScript technologies including AngularJS, React, Node.js, MongoDB, jQuery, etc.
- Won the Microsoft Prize at the AT&T IoT hackathon and Twitter Prize at the NBCUniversal hackathon

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 pseudo-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 Division of Fluid Dynamics conference
- Published results in [Dynamics of Atmospheres and Oceans](#)

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

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|---------------|-----------|-----------|--------------|-----------------------|
| - React/Redux | - HTML 5 | - Webpack | - Git | - MATLAB |
| - Angular | - CSS3 | - Gulp | - Mocha/Chai | - 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 paulrichter.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 journey living in a truck; volunteered at Boulder Food Rescue, Food Not Bombs, and Community Cycles

INTERESTS

Biking, chess, riddles, *really* spicy hot sauce