

# 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 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
- 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 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 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

- |               |           |           |              |                       |
|---------------|-----------|-----------|--------------|-----------------------|
| - 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](http://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 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