Autumn Fjeld

878 Capp Street - San Francisco, CA - 415-810-4344 - autumn@nmutua.com

github.com/autumnfjeld - linkedin.com/in/autumnfjeld - twitter.com/autaut - nmutua.com

EDUCATION

Software Engineering Immersive JavaScript & Modern Frameworks   *Hack Reactor, San Francisco*
Ph.D. & M.S. Materials Science & Engineering   *University of California, Berkeley*
B.S. Chemical Engineering, *Magna Cum Laude*   *Arizona State University*

LANGUAGES & TECHNOLOGIES

- Experienced: JavaScript, HTML/CSS, AngularJS, Jasmine, Firebase, d3.js, Matlab, Bootstrap, Stylus, SASS, Adobe Illustrator, Jasmine, Node, Mongo, Unix scripting, LaTeX
- Familiar: Scheme, C, Backbone, jQuery, Express, Ionic, Cordova, Ruby, Sinatra, Protractor, Photoshop

SOFTWARE EXPERIENCE

Ziploop   *Senior Front End Developer*   Orinda, CA 2014–Present
Mobile shopping organizer and retail portal for retailer to consumer rewards

- Design and implement front-end features for mobile consumer app and two enterprise sites in AngularJS framework. Work closely with President/Product Manager to design UI/UX.
- Collaborate with founding CTO to architect components, maintain build processes (grunt, gulp, git, unix scripts), choose frameworks, modules, and push to keep a clean, maintainable code base.
- Pro-actively present app design changes and modernizations that are routinely accepted.
- Refactored many parts of chaotic, legacy code base to bring maintainability and sanity; solved load time problems for large list of images, optimizing quality and performance; continually strive for great UI/UX.
- Manage collaborations between lead developer and non-technical president, supervise a junior engineer and an assistant to develop technical graphic design skills.

Plentyy   San Francisco, CA 2014
Mobile app that connects users to last-minute bargain deals with local merchants

- Designed back-end schema in Firebase, chosen for Simplelogin authentication, direct database reference binding, and fast prototyping for MVP.
- Built app in AngularJS architecture, ported to mobile with Cordova and styled with Ionic. Careful attention given to AngularJS controller and service modularity to create efficient team workflow.

WikiViz Project   San Francisco, CA 2014
Visualization tool of relationships between Wikipedia articles

- Built a d3.js interactive force directed graph in an AngularJS directive, allowing users to click on a url-node to create an expansive node map of Wikipedia articles.
- Built AngularJS components communicate with back-end API, parse data into d3.js algorithms.

Political Poke   San Francisco, CA 2014

- Hackathon project built in AngularJS, user enters a politician's name to retrieve political campaign contribution data pulled from New York Times API.

TECHNICAL EXPERIENCE

Technical Support Engineer – NUMECA International   San Francisco, CA 2010–2013
Engineering Support & Business Development

- Provided consulting support to engineers at Boeing, Honeywell, etc. on using NUMECA's computational fluid dynamics software tools, delivering solutions in meshing, solver setup, and post-processing.
- Improved software as an integral part of the feedback loop for identifying and troubleshooting software bugs, user-friendliness, and scientific accuracy issues.
- Developend and delivered technical training webinars twice a month to NUMECA's user base.

Freelance Science Editor Global 2010–2014

Editor of scientific manuscripts for non-native English speakers

- Edited scientific manuscripts for non-native English speakers leading to publication in high profile scientific journals.
- Built Joomla site to advertise my services. Brought in business by advertising in Austrian social media. Performed contract work for American Journal Experts, a global editing service for scientists.

Post Doctoral Research – University of Leoben, Austria

Simulation & Modeling of Metallurgical Processes Leoben, Austria 2006–2010

- Created a computational model of a large casting process to simulate flow and heat transfer phenomena for an Austrian steel making company.
- Expanded functionality of commercial simulation software with user defined functions in C and data processing scripts in scheme. Used Matlab extensively for data analysis. Tested feasibility of open source simulation framework, OpenFOAM.
- Defined experimental investigations for industry partner to get input and validation data for simulations.

Ph.D. – University of California, Berkeley

Materials Science & Engineering Berkeley, CA 2001–2006

- Collaborated in a five year project with Alcoa, Inc. to optimize a molten aluminum purification process, with specific goals to reduce toxic chloride emissions and improve energy efficiency.
- Ran fluid dynamics simulations of the purification process to assess mixing, residence time, bubble distribution to find optimum operating conditions, validating results with experimental data.
- Built a bubble probe to use in motel aluminum experiments to detect capacitance change on bubble contact.
- Received student nominated outstanding teaching award as graduate student instructor for undergraduate materials science lab.

ABOUT ME

- Traveling and checking out the world is a must! Love to read, explore San Francisco and the Bay, and eat the amazing food here.
- Started weekly German-learning conversational group for foreigners in Leoben, Austria. Keep up my German with classes at CCSF.
- Love to sew and create colorful clothes, jewelery, bags.
- Volunteer tutor for Women Who Code.