Joseph E. Ludy

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Education
University of California, Irvine//M.S. in Mechanical Engineering//GPA: 3.73//Graduated June 2016
Rutgers University//B.S. in Materials Engineering + B.A in Mathematics//GPA: 3.45//Graduated May 2014

Skills/Summary
- Languages: Java, JavaScript, Python, C++, Groovy
- Databases: MySQL, MongoDB
- Additional: APIs, OOP, Git/SVN, Spring, Flask
- Mastered the art of learning many things quickly and effectively

Work Experience
Web Applications Developer @ Net Assets Corporation [Eugene, OR] (March 2018-July 2018)
- Developed primary webapps for software-as-a-service company using Java-based technologies
- Handled everything from database creation to server-side configurations to front-end functionality
- Gained experience and familiarity with MySQL, XML, TomCat, HTML/CSS/AJAX, JIRA, Selenium

Process Engineer @ Olympic Scientific Inc. [Seattle, WA] (January 2017-December 2017)
- Performed process analysis for mechanical testing
- Analyzed chemical data and implemented concentration forecasting
- Built up my software skills outside of work in preparation for career transition to software

Graduate Simulation Specialist @ University of California, Irvine [Irvine, CA] (June 2014-June 2016):
- Performed computer modeling of million-atom systems via LAMMPS [C++ based framework]
- Routinely submitted UNIX scripts to high-performance-computing nodes to decrease runtime
- Used scipy, numpy, pandas, and matplotlib libraries in Python to analyze billion-point datasets
- Published first-authored publication in first six months of program
- Extended foundations of computational materials science

Personal Projects
The Arpeggiator: A Java-based GUI created from notes recorded from my own guitar that allows for sweep picking practice and arpeggio creation. Heavily utilizes the Swing package.

Twitch Server: A basic HTTP server written in Golang that allows the client to access streaming data from any Twitch.tv user via the Twitch API. Also available as a Docker container.

Customer WebApp: A webapp written in Node.js using Express.js that allows users to add/remove customer information from a connected Mongo database.

Activities/Interests
Meetups: Eugene Web Developers, #EugeneTech, Eugene MySQL

Volunteering: Friends of Trees, Willamalane Park and Recreation District, Lane County Food Rescue

Hobbies: Playing guitar, cooking, watching hockey games (go Canucks!)

Publications
1. *Ludy, Joseph E.*, et al. "Amorphous intergranular films act as ultra-efficient point defect sinks during collision cascades." Scripta Materialia 110 (2016): 37-40.

2. *Ludy, Joseph E.* "Radiation tolerant interface design and complexion dynamics via atomistic modeling". UCI. 2016.