Experience

University of Alberta Department of Mathematics

Research Assistant for Dr. Christoph Frei

Edmonton, AB Summer 2013

- Implemented a model that simulated the evolution of game theory payoff sets as the time between repetitions decreased.
- Matlab, Python and LATEX on OS X

University of Alberta Department of Economics

Research Assistant for Dr. Claudia Landeo

Edmonton, AB Spring 2013

- Wrote a paper on the effect that academic economics has upon judicial decision making in American antitrust case law.
- Mathematica, LATEX on OS X.

Jacobs Engineering

Engineering Intern

Edmonton, AB Summer 2012, 2013

- Performed field audits on Enbridge terminals across the county.
- Monitored database quality.
- Mainly Excel and Maximo on Windows.

Education

University of Alberta

Edmonton, AB

B. Sc. (Hons) Mathematics and Economics. First Class Honors.

2010 - 2014

Research

Aggarwal, K., Rutgers, T, Timbers, F., Hindle, A., & Greiner, R. Detecting Duplicate Bug Reports using Contextual Analysis (Work in progress).

Landeo, C., and Timbers, F. Vertical Restraints: Economic Theory and Antitrust Law (in progress).

Technical Skills

Programming languages

- Strong: Python, JavaScript, R, Matlab, LATEX, Clojure
- Learning: SQL, C++, Haskell, Ruby, Julia

Operating systems and developer environments

• Unix enthusiast, mostly on OS X. Familiar with GNU/Linux & Windows.

Open Source Contributions

Incanter, Contributor

April 2013 — Present

github.com/Incanter/Incanter

Clojure-based statistical computing and graphics environment for the JVM.

- Implemented statistical calculation functions.
- Cleaned up & edited existing documentation.

Cascalog, Contributor github.com/nathanmarz/Cascalog Clojure-based library for data processing on Hadoop.

April 2013 — Present

• Expanded unit test coverage to include the Cascalog-LZO module.

Extracurricular

University of Alberta Model United Nations

Edmonton, AB

Secretary General

September 2011 — Present

- Organized a 500 person conference for top Albertan high school students.
- Led a team that found \$10 000 in savings and added \$4000 in revenue on a \$30 000 budget.
- Worked to find and retain sponsors; led negotiations to renew a \$30 000 sponsorship agreement.

Lambda Chi Alpha

Edmonton, AB

Vice President Finance

January 2014 — Present

- Responsible for managing \$20 000 budget of chapter.
- Led a team that laid the groundwork to create a permanent endowment.

Campus Branch of Major Federal Political Party

Edmonton, AB

President

February 2012 — October 2013

- Recruited undergraduate students to be active in the political process.
- Brought major political figures to speak on campus, including prominent MPs.

University of Alberta Students' Union

Edmonton, AB

Member, Academic Relations Group

September 2012 — October 2013

• Advised the Vice President Academic on policy matters.