14176 SW 128th Place
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# MARC LEEF

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## EDUCATION

**M.S.E.** *Computer Science* — **Princeton University** — **Fall 2015 – Present**
- Expected completion: May 2017

**B.S.** *Computer and Information Science* — **University of Oregon** — **Fall 2011 – June 2015**
- Cum Laude Honors; GPA: 3.85; **Minor**: *Biology*

## EMPLOYMENT

**Teaching Assistant** — **Princeton University** — **Fall 2015 – Present**
Computer Science Department
- Holding office hours and grading tests and assignments for Operating Systems course.

**Software Engineering Intern** — **Amazon.com, Inc** — **Summer 2015**
Amazon Web Services
- Designed and implemented a distributed caching layer atop a Node.js backend using Javascript, the AWS SDK, and Elasticsearch. This caching mechanism decreased customer latency by up to 90% and enabled efficient searching for customers' AWS resources.
- Implemented an easy way to simulate the performance effects of the largest AWS customers (Netflix, Dropbox, etc.) on my team's back and frontend services.

**Bioinformatics Intern** — **Affymetrix, Inc** — **Summer 2014**
- Developed Affymetrix Probe Set Search (*github.com/mleef/PSS)*, a software tool for assessing the design-specific probe coverage of mRNA sequences, created using a combination of Node.js, C++, and Python.

## TECHNICAL EXPERIENCE / PROJECTS

- **ML-Server** (2015 – *github.com/mleef/ML-Server*): RESTful API for constructing and querying machine learning models. Supports Perceptron, Naïve Bayes, and Decision Tree classifiers as well as user authentication, token generation, and an account management system. Written in Java using MySQL for the backend.
- **Markovian** (2015 – *github.com/mleef/Markovian*): Lightweight Markov Network library written in Java. Supports brute force and variable elimination partitioning as well as loopy belief propagation.
- **SamParse** (2013 – *github.com/mleef/SamParse*): Calculation and visualization of RNA sequencer coverage using a sliding window algorithm written in Python and R.
- **Word Diver** (2012 – *github.com/mleef/Word-Diver*): Simple iOS game combining elements of Tetris and Scrabble written in Lua. Released on Apple App Store September 4th, 2012.

## ADDITIONAL EXPERIENCE AND AWARDS

- **President, Club Tennis – University of Oregon (2014-2015):** Managed budget, arranged practices/matches.
- **Residential Assistant, University of Oregon (2012-2013):** RA for freshmen in on-campus dormitory.
- **Dean's List, University of Oregon (2011-2015):** Awarded for GPA greater than 3.75.
- **Semi Finalist, Siemens Competition in MST (2011):** Behavioral biology of drosophila flies.

## Languages and Technologies

- Java, JavaScript, C++, Python, MySQL, Elasticsearch, Node.js, AngularJS, jQuery, Git, SVN, Eclipse, IntelliJ