## **Objective**

"To find a challenging position as an entry-level software engineer."

## **Address**

3203 SE Woodstock Blvd Portland, Oregon 97202

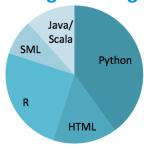
# Tel & Skype

208 365-8052 barney.potter.24

## Web & Git

barneyipotter.com barneypotter24

## **Programming**



# OS Preference

Windows ★★★★ Unix ★★★★★ MacOS ★★★★★ Linux \*\*\*\*

#### **Personal Skills**



# Barney Potter

barney.potter.24@gmail.com

# **Experience**

08/15 - Now Senior Thesis Work

Reed College, Portland, OR

Development of an algorithm to implement the Prize-Collecting Steiner Tree problem in directed hypergraphs. Created a formal definition of directed Steiner Hypertrees, and implemented an exact solution using Python and CPLEX. Became familiar with integer linear programming, graph algorithm design, and combinatorial optimization. Used gene expression data to implement meaningful weighting schema for bioinformatic applications of directed hypergraphs.

01/15 - Now **Laboratory Assistant**  Schaack Lab, Reed College

Design and development of bioinformatic pipelines. Data acquisition and analysis. Molecular biology techniques including DNA/RNA extraction, RNA-Seq, and RNA-FISH.

08/12 - Now Lead Instructor

Science Outreach, Reed College

Developed curriculum and taught science in local Title 1 schools. Oversaw communication between program coordinator and classroom teachers.

**10/14 - 06/15 Teaching Assistant** 

Reed Leadership Academy, Reed College

Developed curriculum and taught leadership to Reed students. Planned lessons, led leadership retreat, and oversaw consolidation of Reed Leadership Academy.

### **Education**

08/12 - 05/16 Bachelor's Degree in Mathematics-Biology. Reed College, Portland, Oregon

Main subjects: Computer Science, Computational Biology, Genomics, Algorithms and Data Structures, GPU Programming, Computer Graphics, Population Ecology and Evolution.

Title of the Thesis: "Implementation of Prize-Collecting Steiner Trees in Directed Signaling Hypergraphs".

# **Achievements & Activities**

05/2015 Summer Undergraduate Research Fellowship

Reed College Awarded summer research and travel fellowship to study whole genome du-

plication in Arabidopsis thaliana.

05/2015 **Inland Northwest Genomics Research Symposium** University of Idaho

> Presented research on the effects of whole genome duplication on transcriptome size and endopolyploidy in A. thaliana.

#### **Interests**

Basketball & softball player. Amateur video game developer & member of the Portland Indie Game Squad. In my spare time I love cooking, raising plants, and birding.

Updated March 7th, 2016