#### **Permanent Address**

228 Mission Lane San Luis Obispo, CA 93405

# MICHAEL LEECE

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**College Address** 847 Riverside Ave Santa Cruz, CA 95060

#### **EDUCATION**

Ph.D., Computer Science, GPA: 4.0

UC Santa Cruz, Santa Cruz CA, Sep 2011-present Harvey Mudd College, Claremont CA, May 2011 B.S., Computer Science, GPA: 3.57 Major: 3.73

#### **Relevant Coursework:**

Data Structures and Program Development –Software Development –Algorithms – Applied Algorithms – Machine Learning – Artificial Intelligence – Programming Languages – Computer Systems – Computer Security – Computability and Logic – Topics in Complexity Theory – Computer Networks – Computer Science Clinic – Microprocessor Systems: Design and Application – Discrete Mathematics

# Honors, Awards, and Societies:

Harvey Mudd College Dean's List, Spring 2008-Fall 2009, Fall 2010-Spring 2011 ACM member, 2009-2012 Sigma Xi Research Society member, 2011-2012

# RESEARCH EXPERIENCE

Research Associate, UC Santa Cruz, Santa Cruz CA, 2011-present

Worked with Professor Arnav Jhala and Ben Weber on developing EISBot, an intelligent autonomous agent for Blizzard's StarCraft: Brood War. Currently investigating the applicability of cognitive architectures and reinforcement learning to the domain.

# Sandia National Labs Clinic Team, Harvey Mudd College, Claremont CA, 2010-2011

Worked on a team of 4 students to aid development of the sparse matrix partitioning tool Isorropia for Sandia National Labs. Implemented and tested new 2D methods for partitioning, and created Python wrappers and a partition visualization tool.

## Research Associate, Pomona College, Claremont CA, 2013

Worked with Professor Tzu-yi Chen on proving the NP-Completeness of the asymmetric bandwidth minimization problem.

#### Research Associate, Harvey Mudd College, Claremont CA, 2010

Worked with Professor Zachary Dodds to develop a system using texture filters and KNN for calculating range-to-obstacle from a single image. Motivated by robotic applications where the cost of a laser rangefinding system is prohibitive relative to the gain for extra precision.

# Software Developer, Harvey Mudd College, Claremont CA, 2009

Worked to create an educational game with a team of 20 using the XNA development toolkit. Was point for client interaction and assisted with software architecture.

### WORK EXPERIENCE

#### Graduate Student Intern, NASA, Mountain View, CA, 2012

Developed BugView, a static analysis workbench to ease NASA's transition into more widespread static analysis for debugging. Interface written in Java using GWT with a Python backend to run analysis tools.

# Grutor, Harvey Mudd College, Claremont CA, 2009-2011

Graded and tutored intermediate level computer science courses.

#### Student Intern, Naval Surface Warfare Center Corona, Norco, CA, 2009

Worked with a team of three to create a network monitoring program for JREAP B and C, a long range communication protocol for use between Navy units.

#### **SKILLS**

Programming Languages: Java, Python, C++, C#, Common Lisp, Scheme, Haskell, Prolog, x86 Assembly, MATLAB, Verilog HDL

Tools: Linux/UNIX, GWT, XNA Development Toolkit, JUnit, SWIG, Weka

#### LEADERSHIP ACTIVITIES

Clinic Project Manager, Harvey Mudd College, Claremont CA, 2010-2011

Organized and led a team of four students in the design, development and testing of software for Sandia National Laboratories.