Matthew W. Leeds

mwleeds@crimson.ua.edu | github.com/mwleeds | linkedin.com/in/mwleeds

Education

The University of Alabama, Tuscaloosa, AL August 2013 — May 2017

- B.S. in Computer Science and Applied Mathematics
- Cumulative GPA: 3.61
- Honors College
- Computer-Based Honors Undergraduate Research Program

Honors and Accolades

- National Merit Finalist
- University of Alabama Dean's List, Fall 2013 and Fall 2015
- University of Alabama President's List, Spring 2014
- Computer-Based Honors Fellowship Scholarship Recipient

Professional Skills

- Proficient in using linux, git, bash, vim, and gdb
- Languages: Fortran, Java, JavaScript, Go, and especially C/C++ and Python
- Moderate experience in web development, Android development, and GTK+ development
- Interests in CS: cryptography, machine learning, blockchain, and systems programming

Publications

- Matthew Leeds and Travis Atkison, "*Preliminary Results of Applying Machine Learning Algorithms to Android Malware Detection*" accepted to CSCI conference, December 2016

Work Experience

Lab Manager, *Computer-Based Honors Program* March 2014 — Present

- Manage a computer lab with desktops and servers running Windows, OS X, and Linux
- Solve technical problems for students involved in undergraduate research

Research Experience

Undergraduate Researcher, *University of Alabama* January 2016 — Present

- Trained a neural network to classify Android malware using TensorFlow
- Wrote Bash and Python scripts to gather, process, and graph data

Undergraduate Researcher, *University of Alabama* September 2014 — April 2015

- Automated the creation of synthetic images of simulated galaxies using Python scripting
- Solved technical issues with running the SUNRISE radiative transfer code on a supercomputer

Undergraduate Researcher, *Clemson University* June 2014 — July 2014

- Developed a linear programming solver in C++
- Built a web interface for modeling heterogeneous networks
- Utilized git, LaTeX, PHP, JavaScript, and other technologies