# Andrew J. Sinclair

## Education

Fall 2008 - Computer Science B.S./M.S.

Winter 2014 California Polytechnic State University, San Luis Obispo, CA

(expected) GPA: 3.02

Graduate Coursework:

2011

Computer Networking, Natural Language Processing

## Skills

Python **Proficient** Scripting, Natural Language Processing

C **Proficient** Systems and Network Programming

Java Familiar Developed tool for teachers to autogenerate tests

Other: Object Oriented, OSI Model, Version Control, Natural Language Toolkit, Click Modular

Router

## Experience

#### Summer Software Engineering Intern ViaSat Inc. Carlsbad, CA

2012 o Ported I<sup>2</sup>C bus arbitration module from VxWorks to Linux by replacing timing and serial communication code

Developed component for reporting the health of utility cards to a Network Management System

## Summer Software Engineering Intern ViaSat Inc. Carlsbad, CA

• Implemented Linux-based router to send traffic from virtual terminals to live network operating center

- Created modules to simulate network traffic impairments such as: restricted bandwidth, increase latency and jitter, and dropped/fragmented packets
- o Added functionality to in-house, reusable C library

## **Projects**

### SoundCloud Song Ranking by Sentiment Classification of User Comments

- o Acquired comments via SoundCloud Python API. Preprocessed malformed comments.
- o Combined lexicon, n-gram, and other features to classify the sentiment of user comments
- Validated algorithm in 167 test runs which demonstrated results better than random rank selection

#### Cisco NetFlow Collector and Visualizer

Used Python library to generate images of computer networks from NetFlow summaries