Andrew J. Sinclair

Education

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

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

(expected) Undergraduate GPA: 3.02

Graduate Computer Networking, Natural Language Processing

Coursework:

2011

Skills

Python **Proficient** Scripting, Natural Language Processing

C **Proficient** Systems and Network Programming

Java Familiar Developed a test autogeneration tool for use by educators

Other: Click Modular Router, Natural Language Toolkit, OSI Model

Experience

Summer Software Engineering Intern ViaSat Inc. Carlsbad, CA

2012 o Ported I²C bus arbitration module from VxWorks to Linux by replacing timing and serial communication code

o 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

Acquired user comments via SoundCloud Python API. Preprocessed malformed comments and hand tagged over 200 comments. Classified comment sentiments with a Naïve Bayes Classifier using: a word emotion lexicon and n-gram features. Validated the method in 167 test runs which demonstrated results better than a baseline of random rank selection.

Cisco NetFlow Collector and Visualizer

Used Python library to generate images of computer networks from traffic flow summaries.