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# 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 Coursework: Computer Networking, Natural Language Processing

## Skills

Python	<b>Proficient</b>	<i>Scripting, Natural Language Processing</i>
C	<b>Proficient</b>	<i>Systems and Network Programming</i>
Java	<b>Familiar</b>	<i>Developed a test autogeneration tool for use by educators</i>
Other:	Click Modular Router, Natural Language Toolkit, OSI Model	

## Experience

Summer 2012	<b>Software Engineering Intern</b> <i>ViaSat Inc. Carlsbad, CA</i> <ul style="list-style-type: none"><li>Ported I<sup>2</sup>C bus arbitration module from VxWorks to Linux by replacing timing and serial communication code</li><li>Developed component for reporting the health of utility cards to a Network Management System</li></ul>
Summer 2011	<b>Software Engineering Intern</b> <i>ViaSat Inc. Carlsbad, CA</i> <ul style="list-style-type: none"><li>Implemented Linux-based router to send traffic from virtual terminals to live network operating center</li><li>Created modules to simulate network traffic impairments such as: restricted bandwidth, increase latency and jitter, and dropped/fragmented packets</li><li>Added functionality to in-house, reusable C library</li></ul>

## 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.