# Nathaniel Cesario

**ncesario@soe.ucsc.edu**

Engineering Building 2 #385
1156 High St.
Santa Cruz, Ca. 95060

http://www.soe.ucsc.edu/people/ncesario

(831) 531-7314

## Summary

Strong ability to work in team-based environments with a knowledge of mathematics, C/C++, Java, Python, Perl, iterative software development, and information visualization techniques.

## Skills

**Programming:** Have completed programming projects written in Java, C/C++, and various scripting and functional languages using the Eclipse IDE, basic text editors, and the command line interface.

**Math:** Proficient in discrete math, graph theory, calculus, and linear algebra.

## Work Experience

UCSC School of Engineering, Santa Cruz, CA                    **2009-Present**
*Assistant Specialist, Computer Science*
Research in uncertainty visualization with Professor Alex Pang at UCSC. Focus on large, complex networks. Implementation primarily in Java, C++, and scripting languages using OpenGL/OpenCL. Led development of a transitional animation framework with undergraduate student.

UCSC, Santa Cruz, CA                    **2012**
*TA for Advanced Graphics and Animation Class (CMPS 162)*
TA'd for CMPS 162 at UC Santa Cruz. This involved putting together two, thirty minute lectures per week as well as lab examples created using OpenGL, C++ and Eclipse CDT.

Los Alamos National Laboratory, Los Alamos, NM                    **2009**
*Summer Intern*
Used Python and Java to implement ParaView as a backend service in the Earth Science Grid's Live Access Server (LAS) and created a user interface in JavaScript, making use of jQuery as well as the HTML5 canvas tag to implement some basic, interactive 3D objects.

## Course Work

**Software Methodolgy:** Wrote an online, multiplayer game in Java with a team of four students for a software engineering project at UC Santa Cruz. A spin-off of the game Stratego, the project was completed using the Unified Process.

## Publications and Presentations

**2010** "Visualizing Node Attribute Uncertainty in Graphs" published in the SPIE/VDA conference in 2011 by Nathaniel Cesario, Alex Pang, and Lisa Singh

**2009** "Visual Graph Comparisons with Bullseyes," a poster on visually comparing multi-modal graphs in IEEE VisWeek 2009 by Nathaniel Cesario and Alex Pang

## Education

University of California, Santa Cruz, Santa Cruz, CA     **Expected Fall 2012**
*M.S. in Computer Science*

University of California, Santa Cruz, Santa Cruz, CA     **2008-2009**
*B.S. in Computer Science with a Minor in Mathematics*

Cabrillo College, Aptos, CA     **2004-2008**
*A.S. in Computer Science, A.A. in Liberal Arts*

## Certifications

**Cabrillo College**
Programming Efficiency Certificates for:

- C++/Java Programming
- Java Game Programming
- Internet Programming

## References

Available upon request