Yang Ho

103 Stanley Ct.
Cary, NC 27513

Phone: (919)319-1617
Email: yho@ncsu.edu

Education

North Carolina State University Aug 2012–Present
B.S., Computer Science and Physics *Raleigh, NC*

- Expected graduation: May 2016
- 3.82/4.0 GPA

Academic Research

RiboSim Spring 2012–Fall 2013
North Carolina State University
Mentored by: Dr. Donald Bitzer, Scott Vu

- Compared the RiboSim gene model of *E Coli* with other exsisting models
- Maintained the RiboSime website

X-ray Photoelectron Spectroscopy Studies of Graphene Summer 2013
North Carolina State University
Mentored by: Dr. Jack Rowe

- Measured the XPS spectra of various graphene samples using X-ray photoelectron spectroscopy

Combinatorial Optimization for Linear Ordering Problem Fall 2014–Spring 2015
North Carolina State University
Mentored by: Dr. Franc Brglez

- Wrote Python based combinitorial solvers of the linear ordering problem.
- Carried out profiling experiments to analyze performance compared to a TCL solver.
- Develope a general purpose program solver for combinatorial optimization sovlers.

Modeling of the Rotator Cuff Muscle using MRI Data Summer 2015
North Carolina State University
Mentored by: Dr. Blair Sullivan & Dr. Katherine Saul

- Modeled MRI data of the rotator cuff muscle using graph theory techniques.
- Implemented imaging routines to visualize MRI data.
- Designed and developed algorithms to quantify the muscle structure.

Memory Profiling of CONCUSS Fall 2015
North Carolina State University
Mentored by: Dr. Blair Sullivan

- Helped maintain and update the CONCUSS software package.
- Performed memory profiling experiments to identify memory inefficiencies of the coloring algorithms.

Technical Experiences

Senior Design Spring 2016
North Carolina State University *Raleigh, NC*

- Worked on developing a visualization tool for algorithmic pipelines related to graphs as a part of a capstone project.

Poster Presentations

A Comparative X-ray Photoelectron Spectroscopy Study of Graphene Grown by Different Methods

- Summer 2013: NCSU Undergraduate Research Symposium. *Raleigh, NC*

Methodology and results for XPS and AFM of films on Graphene

- Spring 2014: NCSU Undergraduate Research Symposium. *Raleigh, NC*
- Spring 2014: McCormick Symposium. *Raleigh, NC*

Applying Graph Theoretical Methods to 3D MRI Rotator Cuff Data

- Fall 2015: BMES Annual Meeting. *Tampa, FL*

Employment

SAS May 2014–August 2014
JMP Development Intern *Cary, NC*

- Used the JMP Scripting Language to develop the Distance Tool Add-on.
- Implemented algorithms for polygon detection and computing polygon area.

Awards and Honors

- Dean's list Fall 2012–Fall 2015

Professional Memberships

- ACM
- Phi Kappa Phi

Skills

Programming Languages:	C/C++, Python, Java, JSL
Operating Systems:	Windows, Linux (Arch, Ubuntu)
Document Preperation:	vim, LaTex, Microsoft Office Suite
Other Software:	LabView, Unity 3D, JMP

Professional Service

Serious About Math and Science Club May 2014–Present
William G. Enloe High School *Raleigh, NC*

- Co-founder of after school club at Enloe Highschool.
- Gave lectures on advaned search algorithms, and automata theory.

STARS Alliance Fall 2014–Present
North Carolina State University *Raleigh, NC*

- Volunteer for the SPARCS program.
- Helped run monthly classes on computer science topics for middle school students.

Physics Grader Fall 2014
North Carolina State University *Raleigh, NC*

- Grader for the Introduction to Scientific Computing in Physics course at NC State University.

Physics Tutor Spring 2016
North Carolina State University *Raleigh, NC*

- Tutor for the advanced physics courses at the Physics Tutorial Center.

Tryhard Games LLC Fall 2013–Present
Raleigh, NC

- Founding member.
- Contributed to the DotDrop! mobile game.
- Desgined and developed the game's sound system and UI.
- Assisted in implementation of core game mechanics.

C++ Tutor Fall 2014–Present
Cary, NC

- Tutoring high school student in programming using C++.