

NAME

PHONE
EMAIL
WEBSITE

Research Interests

Computer vision and related fields, especially where problems involve interesting math. Work has included contour detection in images, image segmentation, object detection/recognition, structure from motion, network localization, and optical flow.

Education

University of Pennsylvania 20XX-Present (Expected: Dec. 20XX)
Ph.D. Computer and Information Science
Area of study: Computer Vision, Machine Learning

University of Colorado 20XX-20XX
B.S. Computer Science and Applied Mathematics
Summa cum laude. GPA: 3.974

Publications

TITLE. NAME and C. J. Name. *EMMCVPR*, 20XX.

TITLE. NAME, C. J. Name, and L. Name. *GlobalSIP*, 20XX.

Conference Presentations

TITLE. NAME, SIAM Front Range Student Conference, March 14, 20XX. Oral Presentation.

TITLE. NAME, SIAM Front Range Student Conference, March 1, 20XX. Oral Presentation.

Academic Experience

Ph.D. Student September 20XX - Present
Advisor: NAME University of Pennsylvania
Performed research in the fields of computer vision and machine learning as work toward a doctoral thesis. The research has included contour detection in images, real-time structure from motion, segmentation, network localization, and optical flow. Thesis topic: optical flow.

Teaching Assistant: Artificial Intelligence Spring 20XX
Professor: NAME University of Pennsylvania
Held office hours, wrote exam questions and graded.

Teaching Assistant: Machine Learning Fall 20XX
Professor: NAME University of Pennsylvania
Taught recitations, held office hours, wrote exam questions and graded.

Research Assistant October 20XX - September 20XX
NAME, NAME University of Colorado
Built statistical discrimination techniques for the analysis of RNA and the multivariate composition space where functions are found. Written entirely in Python.

Used machine learning methods (SVMs, random forests, unsupervised clustering) to predict function based on information concerning cis-regulatory modules in systems such as RNA transcription and alternative splicing.

Developed TopiaryTool, and graphical application for the analysis of phylogenetic trees and their associated metadata.

Research Assistant

January 20XX - May 20XX

NAME

University of Colorado

Researched neural networks and their use in temporal analysis, especially focusing on deep belief networks and their applicability to time series involving co-dependencies with long time gaps.

Work Experience

Engineering Intern in Computer Vision

July 20XX - September 20XX

Google

Venice, CA

Supervisor: NAME

Worked as part of the Google Goggles team on object recognition.

Computer Vision Intern

June 20XX - August 20XX

Howard Hughes Medical Institute

Supervisor: NAME

Developed image segmentation algorithms for segmenting neurons in electron microscopy images. Focused on agglomerative image segmentation and the effect of merge order on the final segmentation quality.

Development Intern

May 20XX - November 20XX

Aeshen (Intel)

Implemented algorithms in computer vision and machine learning, including background subtraction using Gaussian mixture models, the Hough transform, Otsu's thresholding algorithm and Gabor filtering.

Quantitative Analyst Intern

September 20XX - September 20XX

Q Capital Management

Boulder, CO

Developed a genetic programming system - written in MATLAB and C - for the automated evolution of trading systems. The system involved using CUDA and NVIDIA graphics cards for massively parallel computing.

Software Development Intern

June 20XX - January 20XX

BoulderLabs

Boulder, CO

Refactored SyncTool, an application for remote synchronization of file structures. Written entirely in C++ with use of MFC and the Boost C++ libraries. Other work included extensive development using Linux.

Java Developer for MVT

February 20XX - October 20XX

The University of Colorado

Boulder, CO

Developer for the Mathematical Visualization Toolkit (MVT), a mathematical software package written in Java and maintained by students of the University of Colorado.

Honors and Awards

- Distinguished Senior Award in the Department of Applied Mathematics, University of Colorado, 20XX.
- Frank J. LaRocca Memorial Scholarship, 20XX. Merit-based scholarship in the College of Engineering.
- Applied Math Undergraduate Scholarship, 20XX.
- Astronaut Scholarship, 20XX.
- Received a scholarship to attend NASA International Summer School of Astrobiology, held in Santander, Spain, June 20XX.
- Robert C. Byrd Memorial Scholarship, The University of Colorado, 20XX.
- Norlin Scholar, The University of Colorado, 20XX.