ANDREW PORT

Santa Cruz, CA
AndyAPort@gmail.com
https://github.com/mathandy
mathandy.com

PhD Student in **Computer Engineering**, *UC Santa Cruz*
M.S in **Applied Mathematics**, *UC Davis*
B.S in **Mathematics**, *Worcester Polytechnic Institute*
Northfield Mount Hermon High School

Summer Availability: June 15 - Sept 25

PROFILE

Researcher and graduate student working in UCSC **Computer Vision** Lab on **deep learning** models for a variety of tasks. Strong background in **mathematics**. Expert **python** coder. Looking for summer internship opportunities that will provide practice working with deep learning techniques.

RECENT EMPLOYMENT

(2019 Summer and Fall) AI Research Intern @ FXPAL
Proposed and developed a semi-supervised deep learning model involving image embedding, geometric preservation, facial recognition, and audio synthesis. Patent pending and publication to be submitted to NeurIPS.
Recipient of the "esteemed judges' choice" award @ FXPAL Hackathon.

(2018-Current) Senior Technology & Software Intern @ Rare.org
Lead development of deep learning-based computer vision technology for monitoring fishery spatial population distributions in Belize and Honduras. This work required development use of convolutional neural network models for semantic segmentation, contour-based image classification, keypoint detection as well as non-ML steps like color correction and rectification. Also worked with biologists to design data collection and analysis methodology.
Media coverage: https://news.ucsc.edu/2019/07/conservation-ai.html

(Current) Researcher @ UCSC Computer Vision Lab: University of California, Santa Cruz
Grad student working in the computer vision lab on deep learning models for indoor scene understanding with the purpose of aiding people with visual impairments. Current work is related to accurate detection of common indoor objects for purposes of localization.

NOTEWORTHY INDEPENDENT PROJECTS

svgpathtools (2016): Creator of the somewhat popular (over 81,000 PyPI downloads counted by BigQuery) contributed to library of object-oriented tools for manipulating SVG Path objects and Bezier curves in Python
 -- https://pypi.python.org/pypi/svgpathtools

HONORS AND AWARDS

FXPAL Hackathon Esteemed Judges' Choice Award – Awarded for deep learning related research. More details to be added pending patent and paper publication.
NSF VIGRE Summer Graduate Fellowship – Awarded for research in geometric invariant theory by the UC Davis Mathematics Department.
WPI Provost Major Qualifying Project award for Mathematical Sciences – Awarded for research modeling fibroblast cell movement. This is the WPI math department's version of a "best senior thesis" award.

HOBBIES

Songwriter, guitarist, and vocalist – mostly bluesy rock, pop, and bluegrass