Jason R. **Parham**

PH.D. STUDENT · COMPUTER VISION

2-101 Waters View Cr, Cohoes, NY 12047

(714) 814-5305 | parhaj@rpi.edu | bluemellophone | parhaj

Education

Rensselaer Polytechnic Institute *Troy, NY*

DOCTOR OF PHILOSOPHY · COMPUTER SCIENCE · COMPUTER VISION *Aug 2012 - PRESENT*

- Advised by Dr. Charles V. Stewart, Computer Science Department Chair
- Anticipated Graduation: May 2019
- Cumulative GPA: 4.0

Rensselaer Polytechnic Institute *Troy, NY*

MASTER OF SCIENCE · COMPUTER SCIENCE · COMPUTER VISION *Aug 2012 - Dec 2015*

- Master's Thesis: "Photographic Censusing of Zebra and Giraffe in the Nairobi National Park"

Pepperdine University *Malibu, CA*

BACHELOR OF SCIENCE · COMPUTER SCIENCE / MATHEMATICS *Aug 2008 - May 2012*

Projects

IBEIS Computer Vision System / Wildbook Image Analysis Plug-in *Python / C / C++ / SQLite*
Lasagne / Theano / CUDA

GITHUB.COM/WILDBOOKORG/IBEIS *Aug 2013 - PRESENT*

- A stand-alone image and algorithm manager for computer vision image processing; integrates with Wildbook wildlife system via REST API
- Prototypes used at three conservancies in Kenya and during the GZGC (Great Zebra and Giraffe Count) and GGR (Great Grevy's Rally) censusing rallies

Intercheck *Python*

GITHUB.COM/BLUEMELLOPHONE/INTERCHECK *Feb 2015 - PRESENT*

- An automated SpeedTest logger and graphing web interface for monitoring Internet connectivity; designed for use on Raspberry Pi 3

Submitty · **Rensselaer Center for Open Source Software (RCOS)** *PHP / HTML / CSS / MySQL*
JavaScript / jQuery / AJAX

GITHUB.COM/SUBMITTY/SUBMITTY *Sep 2012 - PRESENT*

- A web-based homework submission system with automated code execution, auto-grading, and rubric-based TA grading interface

Experience

Kitware *Clifton Park, NY*

COMPUTER VISION RESEARCH & DEVELOPMENT ENGINEER *August 2017 - PRESENT*

- Pioneered state-of-the-art performance in overhead object detection for secret-level government contracts and using space-ready platforms
- Experience writing and winning multiple intelligence community SBIR proposals and organizing a multi-million dollar DARPA bid

Kitware *Clifton Park, NY*

COMPUTER VISION RESEARCH SUMMER INTERN *May 2015 - July 2017*

- Designed and developed deep learning Python library (KWCNN) using Lasagne / Theano with automated network definition and model training
- Designed and developed aerial change detection system using supervised fully-convolutional neural networks and unsupervised auto-encoders

Rensselaer Polytechnic Institute *Troy, NY*

GRADUATE TEACHING ASSISTANT *Aug 2012 - PRESENT*

- Head / administrative TA for introductory Computer Science I (Python) and graduate-level Computer Vision courses; experience as a lab and office hour instructor, managing web-based grading system (Submitty) and automated grade distribution
- Experience managing a team of 11 TAs, 21 sections, and over 650 concurrent students across 6 semesters and multiple professors

Self-Employed *Cohoes, NY*

FULL STACK WEB DEVELOPER *Aug 2012 - Dec 2016*

- Designed and developed customized, web-based applications, including experience with WordPress CMS