Jason R. **Parham**

PH.D. STUDENT · COMPUTER VISION

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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 2018
- 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

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

Grading Web Application · **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

Cryptographically Secure E-Voting Protocol — *Python*

GITHUB.COM/BLUEMELLOPHONE/JDKK-PROTOCOL — *Mar 2013 - May 2013*

- A scalable, secure e-voting protocol that is hardened against a malicious election judge and colluding voters

Cryptographically Secure ATM Communication Protocol — *C++*

GITHUB.COM/BLUEMELLOPHONE/JTM-PROTOCOL — *Sep 2012 - Nov 2012*

- A secure communication protocol for use between a bank and ATM that uses asymmetric and symmetric encryption

Experience

Kitware — *Clifton Park, NY*

COMPUTER VISION RESEARCH INTERN — *May 2015 - PRESENT*

- Designed, developed, and maintain deep learning Python library 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 - PRESENT*

- Web developer and web administrator for customized web-based applications