TRISTAN MAIDMENT

PROFILE

Name:
Tristan Maidment

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LinkedIn:
https://www.linkedin.com/in/tristanmaidment/

GitHub:
https://github.com/tmaidment

SKILLS

ML Frameworks:

PyTorch | TensorFlow | Keras | scikit-learn | pgmpy

Languages:

Python | Java | MATLAB | R | LISP | SQL | PHP | HTML

Networking / Web Design:

Created a large Minecraft server network with over 5000 players

Designed:
imagephysics.com (2015)
renaissancebuilders.org (2014)
beaverriverpoa.com (2012)

LEADERSHIP

Zeta Psi Fraternity 2016-2017
House Manager

Eagle Scout 2013

EDUCATION

University of Pittsburgh (UPitt)

PhD. Intelligent Systems, Fellow, under Dr. Adriana Kovashka — Started January 2020

Case Western Reserve University (CWRU)

B.S./M.S. Computer Science — Sept 2015 - December 2019

CS B.S. GPA - 3.50 | CS M.S. GPA – 3.75

EXPERIENCE

Intelligent Systems Program (Computer Vision), UPitt

Graduate Research Assistant — January 2020 – current

- Prototyping an interpretable open Visual Question Answering architecture, incorporating knowledge base information via neural probabilistic logic.

Center for Computational Imaging and Personalized Diagnostics, CWRU

Graduate Research Assistant — May 2018 – current

- Designed a recurrent convolutional neural network architecture for automated diagnosis, currently used for radial scar/tubular carcinoma cancer classification.

EECS391: Introduction to Artificial Intelligence, CWRU

Teaching Assistant (2 Semesters) — Aug 2018 – Dec 2019

- Responsible for creating homework assignments, answering students' questions, holding review sessions, and grading.

Real Time Tomography, LLC

Data Analyst — May 2018 – Current

- Designed and implemented convolutional neural networks for patient laterality and chest wall detection in breast imaging. Used in production software.
- Designed and implemented a neural network to automate various types of segmentation. Used in production software.
- Prototyping a neural network to automate image processing for various types of specimen containers.

Prismatic Sensors AB, KTH Royal Institute of Technology, Sweden

Research Assistant — May 2017 – Jul 2017

- Parallelized an image reconstruction algorithm, increasing performance by a factor of 8.

PUBLICATIONS

Maidment TD, Braman N, Chen Y, Mehrkhani F, Yankevich U, Plecha D, Madabhushi A, **"**A combination of intra- and peri-lesion deep learning classifiers from multiple views enables accurate diagnosis of architectural distortion malignancy with digital breast tomosynthesis" poster-discussion **Spotlight Session** presentation, 2019 San Antonio Breast Cancer Symposium, December 10-14, 2019.

Maidment TD, Vent TL, Ferris WS, Wurtele DE, Acciavatti RJ, Maidment ADA, **"**Comparing the imaging performance of computed super-resolution and magnification tomography.**"** Proc. SPIE 10132, Medical Imaging 2017: Physics of Medical Imaging, 1013222 (2017); doi: 10.1117/12.2255564

Ferris WS, Vent TL, **Maidment TD**, Acciavatti RJ, Wurtele DE, Maidment ADA, **"**Geometric calibration for a next-generation digital breast tomosynthesis system.**"** Proc. SPIE 10132, Medical Imaging 2017: Physics of Medical Imaging, 101324C (2017); doi: 10.1117/12.2255301

TD Maidment, Presenter, **"**Comparing the imaging performance of computed super-resolution and magnification tomography,**"** SPIE Medical Imaging 2017, February 11-16.