Jacob Reinhold

CONTACT INFORMATION

Email: jacob.reinhold@jhu.edu Website: https://jcreinhold.github.io

EDUCATION

Johns Hopkins University

Ph.D., Electrical Engineering Expected **May 2022**

The University of Texas at Austin

B.S., Electrical Engineering **December 2016**

PROGRAMMING EXPERIENCE

Languages: Python, C, C++
Tools: Linux/Unix, Git, LaTeX, MATLAB, Mathematica, Docker, Singularity

RESEARCH & PROFESSIONAL EXPERIENCE

Johns Hopkins University Baltimore, MD

Gradaute Research Assistant **Aug 2017 – Present**

Research data normalization and image synthesis techniques for MR images of the brain. Develop machine learning and statistical python packages for image processing and analysis using scikit-learn and PyTorch.

Applied Research Laboratories, The University of Texas at Austin Austin, TX

Engineering Scientist Associate **Nov 2014 – Jun 2017**

Implemented array processing algorithms. Characterized ionosperic activity through analysis of communication signal data using Python with NumPy, SciPy, Matplotlib, and various other scientific packages. Created software-defined radio applications.

Biomedical Informatics Lab, The University of Texas at Austin Austin, TX

Undergraduate Research Assistant **May 2016 – Aug 2016**

Investigated the effect of stereo-viewing digital breast tomosynthesis projection images on lesion detection by conducting tests on simulated breast images with a numerical model observer in MATLAB. Wrote scientific papers and created presentations.

US Marine Corps Reserves

Platoon Sergeant **Feb 2010 – Oct 2015**

Responsible for the accomplishment of communication platoon's mission including the well-being and professional development of over 20 Marines. Meritoriously promoted to Sergeant.

JOURNAL ARTICLES

G. Wen, H. Chang, J. Reinhold, J. Lo, M. Markey, "Virtual assessment of stereoscopic viewing of digital breast tomosynthesis projection images", Journal of Medical Imaging, 2017, accepted for publication.

CONFERENCE PRESENTATIONS

J. Reinhold, G. Wen, J. Lo, M. Markey, "Lesion detectability in stereoscopically viewed digital breast tomosynthesis projection images: a model observer study with anthropomorphic computational breast phantoms" SPIE Medical Imaging Symposium, February 2017, Orlando, FL.

HONORS & AWARDS

Ferdinand Hamburger Jr. Fellowship (2017-2018)
Raytheon-SVA Scholarship (2016)
Frederic and Julia Weigl Scholarship (2016)
Jean Perkins Combat Veteran Scholarship (2015)
Jerry A. and Martha Lel Hawkins Endowed Scholarship (2014-2015)