Jacob Reinhold

Curriculum Vitae

January 2019

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Education and Qualifications

Expected May 2022 Johns Hopkins University

Ph.D., Electrical Engineering

December 2016 The University of Texas at Austin

B.S., Electrical Engineering

Research Experience

Aug 2017 – **Johns Hopkins University**Present *Graduate Research Assistant*

Research anomaly detection and image synthesis in MR images of the brain

Nov 2014 - Applied Research Laboratories, The University of Texas at Austin

Jun 2017 Engineering Scientist Associate

Investigate the effect of ionospheric activity on radio wave propagation

May 2016 - Biomedical Informatics Lab, The University of Texas at Austin

Aug 2016 Undergraduate Research Assistant

Researched performance of stereo-viewed radiological images in lesion detection

Journal Articles

- 1. B. Dewey, C. Zhao, J. Reinhold, A. Carass, K. Fitzgerald, E. Sotirchos, S. Saidha, J. Oh, P. Calabresi, Pvan Zijl, J. Prince, "DeepHarmony: A deep learning approach to contrast harmonization across scanner changes", Magnetic Resonance Imaging, *Under review*.
- 2. 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, 2018.

Conference Presentations

- J. Reinhold, B. Dewey, A. Carass, J. Prince, "Evaluating the Impact of Intensity Normalization on MR Image Synthesis" SPIE Medical Imaging Symposium, To Appear February 2019, San Diego, CA.
- 2. 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.
- 3. T. Gaussiran, R. Calfas, A. Fleischmann, D. Munton, D. Rainwater, and J. Reinhold, "HF Signal Geolocation vs. Ionospheric Structure: An Engineering Solution Approach", Ionospheric Effects Symposium, May 2015, Alexandria, VA. Presented by: D. Rainwater.

Awards

2017–2018	Ferdinand Hamburger Jr. Fellowship
2016	Raytheon-SVA Scholarship
2016	Frederic and Julia Weigl Scholarship
2015	Jean Perkins Combat Veteran Scholarship
2014–2015	Jerry A. and Martha Lel Hawkins Endowed Scholarship
2016	Nominated for Texas Exes Presidential Leadership Award
	Member of Eta Kappa Nu – Electrical Engineering Honor Society

Professional Experience

Feb 2010 – Oct 2015	United States Marine Corps Reserves Platoon Sergeant Meritoriously promoted to manage and advise over 20 junior Marines
May 2014 -	Advanced Micro Devices, Inc.
Aug 2014	Co-op Engineer
	Developed tests to validate memory on in-development microprocessor

Skills

Programming Languages: Python, Julia, C, C++, Java

Tools: Linux/Unix, Git, LATEX, MATLAB, Mathematica

Talks

Apr 2016 "Soap Films and Minimal Surfaces", Student presentation for Spring 2016 Directed Reading Program in Mathematics