Brevin Tilmon

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Education

University of Florida 2019 - 2023 (expected)
Ph.D. Electrical and Computer Engineering
Advised by Dr. Sanjeev Koppal

Murray State University 2015 - 2019
B.S. Engineering Physics

Experience

Meta 2021
Research Intern, Reality Labs
Developed depth estimation algorithms for augmented and virtual reality devices.

National Aeronautics and Space Administration (NASA) 2021
Research Intern, Intelligent Robotics Group
Developed a simulator and 3D reconstruction algorithms for a computational imaging device.

University of Florida 2019 - Present
Graduate Research Assistant, FOCUS Lab
Developed computational imaging devices, computer vision and machine learning algorithms.

Publications

SaccadeCam: Adaptive Visual Attention for Monocular Depth Sensing
B. Tilmon and S. J. Koppal
International Conference on Computer Vision (ICCV), 2021

Fast Foveating Cameras for Dense Adaptive Resolution
B. Tilmon, E. Jain, S. Ferrari and S. J. Koppal
Transactions on Pattern Analysis and Machine Intelligence (PAMI), 2021

FoveaCam: A MEMS Mirror-Enabled Foveating Camera
B. Tilmon, E. Jain, S. Ferrari and S. J. Koppal.
International Conference on Computational Photography (ICCP), 2020

Towards a MEMS-based Adaptive LIDAR
F. Pittaluga, Z. Tasneem, J. Folden, B. Tilmon, A. Chakrabarti and S. J. Koppal.
International Conference on 3D Vision (3DV), 2020

Design and Calibration of a Fast Flying-Dot Projector for Dynamic Light Transport Acquisition
K. Henderson, X. Liu, J. Folden, B. Tilmon, S. Jayasuriya and S. J. Koppal.
Transactions on Computational Imaging 2020

Novel Approach of Wavelet Analysis for Nonlinear Ultrasonic Measurements and Fatigue Assessment of Jet Engine Components
G. Bunget, B. Tilmon, A. Yee, D. Stewart, J. Rogers, et al.
American Institute of Physics 2018

Patents

Fast Foveation Camera and Controlling Algorithms
S. J. Koppal, Z. Tasneem, D. Wang, H. Xie, B. Tilmon
US16844597, 2020