Brevin Tilmon

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Education

PhD, University of Florida, Electrical and Computer Engineering
BS, Murray State University, Engineering Physics

Experience

NASA, Intelligent Robotics Group
Research Intern

Facebook, Facebook Reality Labs
Research Intern

University of Florida, FOCUS Lab
Graduate Research Assistant, Advisor: Sanjeev Koppal

Publications

- SaccadeCam: Adaptive Visual Attention for Monocular Depth Sensing B. Tilmon, S. J. Koppal arXiv, 2021
- 2. Fast Foveating Cameras for Dense Adaptive Resolution

B. Tilmon, E. Jain, S. Ferrari and S. J. Koppal Transactions on Pattern Analysis and Machine Intelligence (TPAMI), 2021

- 3. FoveaCam: A MEMS Mirror-Enabled Foveating Camera
 - B. Tilmon, E. Jain, S. Ferrari, S. J. Koppal. International Conference on Computational Photography (ICCP), 2020
- 4. Towards a MEMS-based Adaptive LIDAR
 - F. Pittaluga, Z. Tasneem, J. Folden, B. Tilmon, A. Chakrabarti, S. J. Koppal. International Conference on 3D Vision (3DV), 2020
- 5. Design and Calibration of a Fast Flying-Dot Projector for Dynamic Light Transport Acquisition

K. Henderson, X. Liu, J. Folden, B. Tilmon, S. Jayasuriya, S.J. Koppal. Transactions on Computational Imaging (TCI), 2020

- 6. 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

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

Awards

NSF GRFP Honorable Mention	2020
Graduate School Preeminence Award, University of Florida	2019
Kirkland Fellowship, University of Florida	2019

Skills

Software: Python, C++, PyTorch, CUDA, NVIDIA OptiX, Mitsuba **Hardware**: Depth/RGB Cameras, Embedded Systems, Optics Bench