

Brevin Tilmon

Cell: 812-568-3344 – btilmon@ufl.edu – btilmon.github.io

Research Interests

I am interested in computational photography, computer vision and machine learning. My research involves developing adaptive computational imaging systems.

Education

PhD, Electrical Engineering, University of Florida	Present
BSE, Engineering Physics, Murray State University	2019

Work Experience

Facebook , Facebook Reality Labs, Redmond, WA Research Intern Depth sensing for augmented/virtual reality.	Fall 2021
University of Florida , FOCUS Lab, Gainesville, FL Graduate Research Assistant to Dr. Sanjeev J. Koppal Developing adaptive computational imaging systems and machine learning algorithms.	Present

Publications

1. **SaccadeCam: Adaptive Visual Attention for Monocular Depth Sensing**
B. Tilmon and S. J. Koppal
arXiv 2021
2. **FoveaCam: A MEMS Mirror-Enabled Foveating Camera**
B. Tilmon, E. Jain, S. Ferrari, S. J. Koppal.
International Conference on Computational Photography (ICCP 2020)
3. **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)
4. **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.
IEEE Transactions on Computational Imaging (TCI 2020)
5. **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

Awards

NSF GRFP Honorable Mention	2020
Graduate School Preeminence Award, University of Florida	2019
Kirkland Fellowship, University of Florida	2019
Jesse & Deborah Jones Scholarship, Murray State University	2015
Housing Scholarship, Murray State University	2015

Skills

Programming: C/C++, Python, MATLAB
Sensors and Robotics: Depth/RGB Cameras, Embedded Systems, Optics Bench