# Brevin Tilmon

Homepage: https://btilmon.github.io Email: btilmon@ufl.edu

# Education

PhD, Electrical and Computer Engineering, University of Florida

BSE, Engineering Physics, Murray State University

2019 - Present
2015 - 2019

## Experience

NASA, Intelligent Robotics Group

Summer 2021

Research Intern with Uland Wong and Michael Dille

Developing 3D reconstruction algorithms for arbitrary BRDFs.

University of Florida, FOCUS Lab

2019 - Present

Graduate Research Assistant, Advisor: Sanjeev Koppal Developing computer vision algorithms and sensors.

#### **Publications**

- 1. 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

# Awards

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

## Skills

Software: C++, Python, MATLAB

Hardware: Depth/RGB Cameras, Embedded Systems, Optics Bench