# **Brevin Tilmon**

I am a PhD student skilled in computational photography, computer vision, machine/deep learning, and robotics. My research focuses on developing computer vision algorithms and hardware for adaptive vision sensors.

#### Personal

Phone (812) 568-3344
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#### Education

Ph.D. Electrical Engineering

2019-Present

University of Florida Advisor: Dr. Sanjeev Koppal

**B.S. Engineering Physics**Murray State University, 3.8/4.0

2015-2019

## Publications, Available at https://btilmon.github.io/

- 1. Brevin Tilmon, Eakta Jain, Silvia Ferrari, Sanjeev Koppal. "FoveaCam: A MEMS Mirror-Enabled Foveating Camera". International Conference on Computational Photography 2020.
- 2. Francesco Pittaluga, Zaid Tasneem, Justin Folden, Brevin Tilmon, Ayan Chakrabarti, Sanjeev Koppal. "A MEMS-Based Foveating LIDAR to Enable Real-Time Adaptive Depth Sensing". arXiv 2020.
- 3. Kristofer Henderson, Xiaomeng Liu, Justin Folden, Brevin Tilmon, Suren Jayasuriya, Sanjeev Koppal. "Design and Calibration of a Fast Flying-Dot Projector for Dynamic Light Transport Acquisition". **Transactions on Computational Imaging 2020**.
- Gheorge Bunget, Brevin Tilmon, Andrew Yee, Dylan Stewart, James Rogers, et al. "Novel Approach of Wavelet Analysis for Nonlinear Ultrasonic Measurements and Fatigue Assessment of Jet Engine Components". American Institute of Physics 2018.

### **Experience**

#### **Graduate Research Assistant**

2019-Present

Florida Optics and Computational Sensor Lab, University of Florida

Design computer vision algorithms and hardware for adaptive vision sensors (cameras, depth sensors, projectors).

#### **Undergraduate Research Assistant**

2016-2019

NDE Lab, Murray State University and FOCUS Lab, University of Florida

#### **Electrical Engineering Intern**

2017

Berry Global Inc.

#### **IEEE Robotics Club President**

2017-2019

Murray State University

#### **Awards**

**NSF GRFP Honorable Mention 2020** 

Graduate School Preeminence Award, University of Florida

Jesse Jones Endowment, Housing Scholarship, Sigma Pi Sigma, Murray State University

#### Skills

Software: C++, Python, OpenCV, PyTorch, MATLAB, Solidworks

System Design: Machine vision cameras, depth sensors, MEMS Devices, Microcontrollers