Brevin Tilmon

PERSONAL

Phone	(812) 568-3344
Mail	btilmon@ufl.edu
Website	https://btilmon.github.io/

EDUCATION

Ph.D. Electrical Engineering 2019-Present
University of Florida
Advisor: Dr. Sanjeev Koppal

B.S. Engineering Physics 2015-2019
Murray State University, 3.8/4.0

PUBLICATIONS

- **A MEMS-Based Foveating LIDAR to Enable Real-Time Adaptive Depth Sensing**
  arxiv 2020
  F. Pittaluga*, Z. Tasneem*, J. Folden*, B. Tilmon, A. Chakrabarti, S. Koppal

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

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

- **Novel Approach of Wavelet Analysis for Nonlinear Ultrasonic Measurements and Fatigue Assessment of Jet Engine Components**
  American Institute of Physics 2018
  G. Bunget*, B. Tilmon, A. Yee, D. Stewart, J. Rogers, M. Webster, K. Farinholt, F. Friedersdorf, M. Pepi, and A. Ghoshal.

* Denotes first author.

EXPERIENCE

- **Graduate Research Assistant** 2019-Present
  Florida Optics and Computational Sensor Lab, University of Florida
  Develop imaging technologies including adaptive lidars, cameras, projectors, and computer vision/computational photography algorithms.

- **Undergraduate Research Intern** 2018
  Florida Optics and Computational Sensor Lab, University of Florida
  Developed projector-camera system contributing to a publication in Transactions on Computational Imaging.

- **Undergraduate Research Assistant** 2016-2019
  Non Destructive Evaluations Lab, Murray State University
  Developed denoising wavelet algorithm in MATLAB that contributed to a publication in American Institute of Physics.

- **Electrical Engineering Intern** 2017
  Berry Global Inc.
  Developed python application for real time control of production systems.

- **IEEE Robotics President** 2017-2019
  Murray State University IEEE Robotics Branch
  Competed in IEEE SoutheastCon Hardware(Robotics) Competition. Developed autonomous robots using lidars, cameras, and embedded systems with team of classmates, placed top 20 in 2018 and 2019.

- **Teaching Assistant** 2016-2019
  Murray State University
  Instructed physics labs for electromagnetism and mechanics.

AWARDS

Graduate School Preeminence Award, University of Florida
Sigma Pi Sigma, Murray State University
Jesse Jones Endowment, Murray State University
Engineering Physics Housing Scholarship, Murray State University

SKILLS

Programming: C/C++, Python, MATLAB
Frameworks: OpenCV, PyTorch, Darknet, Tensorflow
Miscellaneous: Circuit design, Solidworks and 3D printing, Machine shop basics
Graduate courses: Digital Signal Processing, Machine Learning, Adaptive Signal Processing