Brevin Tilmon

PERSONAL

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EDUCATION

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

B.S. Engineering Physics 2015-2019
Murray State University

PUBLICATIONS

FoveaCam: A MEMS Mirror-Enabled Foveating Camera
International Conference on Computational Photography, 2020
Brevin Tilmon, Eakta Jain, Silvia Ferrari, and Sanjeev Koppal.

Design and Calibration of a Fast Flying-Dot Projector for Dynamic Light Transport Acquisition
Transactions on Computational Imaging, 2020
Kristofer Henderson, Xiaomeng Liu, Justin Folden, Brevin Tilmon, Suren Jayasuriya, and Sanjeev Koppal.

Novel Approach of Wavelet Analysis for Nonlinear Ultrasonic Measurements and Fatigue Assessment of Jet Engine Components
American Institute of Physics, 2018
Gheorghe Bunget, Brevin Tilmon, Andrew Yee, Dylan Stewart, James Rogers, Matthew Webster, Kevin Farinholt, Fritz Friedersdorf, Marc Pepi, and Anindya Ghoshal.

EXPERIENCE

Graduate Research Assistant 2019-Present
Florida Optics and Computational Sensor Lab, University of Florida
Develop sensing technologies based on computer vision, computational photography, robotics, and deep learning.

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

Undergraduate Research Assistant 2016-2019
Non Destructive Evaluations Lab, Murray State University
Designed wavelet filtering algorithms for visualizing damages in materials that contributed to a publication in American Institute of Physics.

Electrical Engineering Intern 2017
Berry Global Inc.
Developed data centralization application allowing monitoring and real time control of systems throughout production facility.

IEEE Robotics President 2017-2019
Murray State University IEEE Robotics Branch
Led team on design and implementation of autonomous robots that annually competed in the IEEE SoutheastCon Hardware Competition. Used cameras and lidar alongside computer vision and machine learning algorithms for robotic perception.

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