

# Brevin Tilmon

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Website: <https://btilmon.github.io/>

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.

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## Education

<b>Ph.D. Electrical Engineering</b> University of Florida Advisor: Dr. Sanjeev Koppal	2019-Present
<b>B.S. Engineering Physics</b> Murray State University, 3.8/4.0	2015-2019

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## 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**.
4. 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**.

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## Experience

<b>Graduate Research Assistant</b> Florida Optics and Computational Sensor Lab, University of Florida Design computer vision algorithms and hardware for adaptive vision sensors (cameras, depth sensors, projectors).	2019-Present
<b>Undergraduate Research Assistant</b> NDE Lab, Murray State University and FOCUS Lab, University of Florida	2016-2019
<b>Electrical Engineering Intern</b> Berry Global Inc.	2017
<b>IEEE Robotics Club President</b> Murray State University	2017-2019

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## Awards

**NSF GRFP Honorable Mention 2020**  
**Graduate School Preeminence Award, Kirkland Fellowship**, University of Florida  
**Jesse Jones Endowment, Housing Scholarship, Sigma Pi Sigma**, Murray State University

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## Skills

**Software:** C++, Python, OpenCV, PyTorch, MATLAB, Solidworks  
**System Design:** Machine vision cameras, depth sensors, MEMS Devices, Microcontrollers