Brevin Tilmon

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Education

University of Florida   5/2019 - 12/2023
Ph.D. Electrical and Computer Engineering

Murray State University   8/2015 - 5/2019
B.S. Electrical Engineering, 3.8/4.0

Experience

Snap Inc.   5/2022 - 11/2022
Research Intern, Computational Imaging Team
Developed state of the art computational imaging system under review for publication and patent.

Meta   8/2021 - 12/2021
Research Intern, Reality Labs
Developed efficient machine learning depth sensing algorithm for Meta AR/VR devices.

NASA Ames Research Center   5/2021 - 8/2021
Research Intern, Intelligent Robotics Group
Developed a simulator in CUDA of a computational microscope for reflectance estimation.

University of Florida   5/2019 - Present
Graduate Research Assistant, Florida Optics and Computational Sensor Lab
Developing novel computer vision algorithms and imaging systems for efficient computer vision.

Publications

(Additional publications and patents available at Google Scholar)

- B. Tilmon and S. J. Koppal. "SaccadeCam: Adaptive Visual Attention for Monocular Depth Sensing". **ICCV**, 2021. Website.
- B. Tilmon, E. Jain, S. Ferrari and S. J. Koppal. "Fast Foveating Cameras for Dense Adaptive Resolution". **PAMI**, 2021. Website.
- B. Tilmon, E. Jain, S. Ferrari and S. J. Koppal. "FoveaCam: A MEMS Mirror-Enabled Foveating Camera". **ICCP**, 2020. Website.
- F. Pittaluga, Z. Tasneem, J. Folden, B. Tilmon, A. Chakrabarti and S. J. Koppal. "Towards a MEMS-based Adaptive LIDAR". **3DV**, 2020. Website.
- K. Henderson, X. Liu, J. Folden, B. Tilmon, S. Jayasuriya and S. J. Koppal. "Design and Calibration of a Fast Flying-Dot Projector for Dynamic Light Transport Acquisition". **Transactions on Computational Imaging**, 2020. Website.

Open Source Software

illumiGrad [GitHub]
PyTorch abstracted local bundle adjustment for RGBD cameras.