

Brevin Tilmon

GitHub - Google Scholar - Personal Website - 812-568-3344

Summary

I am a computer vision PhD student in the FOCUS Lab at the University of Florida.

Experience

- Snap Inc. - Research Intern - Computational Imaging Team 2022
- Meta - Research Intern - Reality Labs 2021
- NASA - Research Intern - Intelligent Robotics Group 2021
- University of Florida - Graduate Research Assistant - FOCUS Lab 2019 - 2023

Software

- holoCu [GitHub] - CUDA-accelerated holography
- illumiGrad [Github] - PyTorch-abstracted RGBD bundle adjustment

Publications (selected)

1. B. Tilmon, Z. Sun, S. J. Koppal, Y. Wu, G. Evangelidis, R. Zahrredine, G. Krishnan, S. Ma, and J. Wang. “Energy-Efficient Adaptive 3D Sensing”. CVPR, 2023. [Project Website]
2. B. Tilmon and S. J. Koppal. “SaccadeCam: Adaptive Visual Attention for Monocular Depth Sensing”. ICCV, 2021. [Project Website]
3. B. Tilmon, E. Jain, S. Ferrari and S. J. Koppal. “Fast Foveating Cameras for Dense Adaptive Resolution”. PAMI, 2021. [Project Website]
4. B. Tilmon, E. Jain, S. Ferrari and S. J. Koppal. “FoveaCam: A MEMS Mirror-Enabled Foveating Camera”. ICCP, 2020. [Project Website]
5. F. Pittaluga, Z. Tasneem, J. Folden, B. Tilmon, A. Chakrabarti and S. J. Koppal. “Towards a MEMS-based Adaptive LIDAR”. 3DV, 2020. [Project Website]
6. 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. [Project Website]

Education

- University of Florida 2019 - 2023
PhD - Electrical and Computer Engineering
- Murray State University 2015 - 2019
BS - Electrical Engineering - 3.8/4.0

Skills

- Computer Vision, Computer Graphics, Machine Learning
- GPU (CUDA, OpenGL), C++, Python, PyTorch
- Linux, Embedded Systems, Electronics, Optics