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# Brevin Tilmon

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

### BIO

I am currently getting my PhD in computer vision from the FOCUS Lab at the University of Florida. During this time, I have focused on GPU programming and C++ for computer vision and machine learning on embedded linux systems, and on computational photography (depth sensors, cameras, etc). I published several papers and did research internships on these topics on computer vision teams at various tech companies.

### **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

- 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 PhD, Electrical and Computer Engineering

2019 - 2023 (Expected)

• Murray State University BS, Electrical Engineering, 3.8/4.0 2015 - 2019

## **SKILLS**

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