Ji Hyun Nam

Email: jnam26@wisc.edu https://jihyun-nam.github.io Mobile: +1-608-886-2399

EDUCATION

University of Wisconsin Madison Madison, WI, USA

Doctor of Philosophy (Ph.D) in Electrical and Computer Engineering; GPA: 3.88/4.00 Aug. 2016 - May 2021

Bauman Moscow State Technical University

Master of Laser Engineering and Technologies; GPA: 4.00/4.00 Sep. 2014 - June 2016

Moscow, Russia

Moscow, Russia

Bauman Moscow State Technical University

Bachelor of Engineering and Technologies; GPA: 3.97/4.00 Sep. 2010 - June 2014

Experience

LandScan Fresno, CA

Research intern (Applications of time-of-flight cameras, SPAD) June 2020 - Sep 2020 Madison, WI

University of Wisconsin Madison

Research Assistant(RA) at Computational Optics Group Sep 2016 - May 2021

University of Wisconsin Madison

Madison, WI Teaching Assistant(TA) ECE 431 - Digital Signal Processing Fall 2018, Fall 2020

DARPA: "REVEAL" Program Review

Pittsburgh, PA Prototype experimental setup demonstration Fall 2019

AirForce Program Review Washington D.C. Research presenter at Remote Sensing Program Review Fall 2017

Moscow, Russia

Bauman Moscow State Technical University

Research Assistant (Bio-metric systems for human identification using deep learning) fall 2014 - Spring 2015 Moscow, Russia

Optical System Laboratory

Research Assistant (Interferometer system) fall 2013 - Summer 2014

Photonics Laboratory Moscow, Russia

Research Assistant (lasers and cooling systems) Spring, 2013

Publications

[J10] J.H. Nam, E. Brandt, S. Bauer, X. Liu, M. Renna, A. Tosi, E. Sifakis, A. Velten, "Low-latency Real-time time-of-flight non-line-of-sight imaging at 5 frames per second," Nature Communications, 2021

[J9] J. Marco, A. Jarabo, J.H. Nam, X. Liu, M.Á. Cosculluela, A. Velten, D. Gutierrez, "Virtual light transport matrices for non-line-of-sight imaging," Proceedings of the IEEE/CVF International Conference on Computer Vision (ICCV), 2021

[J8] J. Peng, F. Mu, J.H. Nam S. Raghavan, Y. Li, A. Velten, Z. Xiong, "Towards Non-Line-of-Sight Photography", under review.

[J7] M. Renna, J.H. Nam, M. Buttafava, F. Villa, A. Velten, A. Tosi, "Fast-Gated 16× 1 SPAD Array for Non-Line-of-Sight Imaging Applications," in Instruments 4.2 (2020): 14.

[J6] M.L. Manna, J.H. Nam, S.A. Reza, A. Velten, "Non-line-of-sight-imaging using dynamic relay surfaces," in Optics express 28.4 (2020): 5331-5339.

[J5] **J.H. Nam**, and A. Velten, "Super-resolution remote imaging using time encoded remote apertures," in Applied Sciences 10.18 (2020): 6458.

[J4] X. Liu, I. Guillén, M.L. Manna, J.H. Nam, S.A. Reza, T.H. Le, A. Jarabo, D. Gutierrez, A. Velten, "Non-line-of-sight imaging using phasor-field virtual wave optics," in Nature 572.7771 (2019): 620-623.

- [J3] M.L. Manna, X. Liu, J.H. Nam, M. Laurenzis, A. Velten, "A line-of-sight approach for non-line-of-sight imaging (conference presentation)," in Computational Imaging IV. Vol. 10990. International Society for Optics and Photonics, 2019.
- [J2] M. Laurenzis, M.L. Manna, M. Buttafava, A. Tosi, J.H. Nam, M. Gupta, A. Velten, "Advanced active imaging with single photon avalanche diodes," in Emerging Imaging and Sensing Technologies for Security and Defence III; and Unmanned Sensors, Systems, and Countermeasures. Vol. 10799. International Society for Optics and Photonics, 2018.
- [J1] A. Velten, M. L. Manna, J.H. Nam, X. Liu, "Non-line-of-sight 3D imaging (Conference Presentation)," in Three-Dimensional Imaging, Visualization, and Display, 2018

Professional Activities

• Paper Reviewer: Optics Express(2020, 2021)

Programming Skills

- Languages: MATLAB, C++, Latex
- Technologies: AWS, Google Cloud Platform, Colab, Github, Bitbucket
- Softwares: AutoCAD, MathCAD, Zemax, Solidworks, Micro-Cap

LANGUAGES

Korean: Native English: Fluent Russian: Fluent

MENTORSHIP

• Sabhatina Palani Selvam: Master student, 2019-2020

• Daniel Jonathan Noah: Undergraduate student, 2017