

Salman Siddique Khan

CONTACT INFORMATION	ESB 221, Electrical Sciences Block, IIT Madras Chennai, India - 600036	Homepage: siddiquesalman.github.io ✉ E-mail: sk39@smail.iitm.ac.in
RESEARCH INTEREST	My field of research is Computational Photography and Computer Vision. I work on designing new imaging systems and computational techniques that extend the capabilities of conventional cameras. In particular, I am interested in developing algorithms based on vision, deep learning, and optics that make these computational imaging systems work.	
EDUCATION	Indian Institute of Technology Madras , Chennai, India	2018–2023 (expected)
	<ul style="list-style-type: none">• Ph.D., Department of Electrical Engineering• Advisor: Prof. Kaushik Mitra.	
	National Institute of Technology , Rourkela, India.	2014–2018
	<ul style="list-style-type: none">• B.Tech., Electronics and Instrumentation Engineering.	
WORK EXPERIENCE	NEC Labs America	June 2022 – Dec 2022
	<ul style="list-style-type: none">• Position: Research Intern• Topic: Designing cameras that perform optical encryption.• Mentor: Dr. Francesco Pittaluga, Dr. Manmohan Chandraker.	
	Rice Computational Imaging Lab	Jan 2021 – Jul 2021
	<ul style="list-style-type: none">• Position: Research Associate• Topic: Designing diffractive optics for high-speed lensless imaging.• Mentor: Dr. Ashok Veeraraghavan.	
	Rice Computational Imaging Lab	May 2019 – Nov 2019
	<ul style="list-style-type: none">• Position: Research Associate• Topic: Designing optical and analog components for privacy-enhancing cameras.• Mentor: Dr. Ashok Veeraraghavan.	
	Indian Statistical Institute	May 2016 – July 2016
	<ul style="list-style-type: none">• Position: Intern• Topic: Random forest based histopathology image segmentation.• Mentor: Dr. Angshuman Paul.	
SELECTED PUBLICATIONS	<ol style="list-style-type: none">1. Atreyee Saha, Salman S. Khan, Sagar Sehrawat, Sanjana Prabhu, Shanti Bhattacharya, Kaushik Mitra, “LWGNet: Learned Wirtinger Gradients for Fourier Ptychographic Phase Retrieval”, European Conference on Computer Vision (ECCV) 2022, Tel Aviv, Israel.2. Dhruvjyoti Bagadthey, Sanjana Prabhu, Salman S. Khan, Tony Fredrick, Vivek Boominathan, Ashok Veeraraghavan, Kaushik Mitra, “FlatNet3D: Intensity And Absolute Depth from Single-shot Lensless Capture”, Journal of the Optical Society of America A (JOSA A) 2022.	

	<ol style="list-style-type: none"> 3. Salman S. Khan, Varun Sundar, Vivek Boominathan, Ashok Veeraraghavan, Kaushik Mitra, “FlatNet: Towards Photorealistic Scene Reconstruction from Lensless Measurements”, IEEE Transactions on Pattern Analysis and Machine Intelligence (TPAMI) 2020. 4. Jasper Tan, Salman S. Khan, Vivek Boominathan, Jeffrey Byrne, Richard Baraniuk, Kaushik Mitra, Ashok Veeraraghavan, “CAnOPIC: Pre-Digital Privacy-Enhancing Encodings for Computer Vision”, IEEE International Conference on Multimedia and Expo (ICME) 2020, London, UK. (Oral) 5. Salman S. Khan, Adarsh V.R., Vivek Boominathan, Jasper Tan, Ashok Veeraraghavan, Kaushik Mitra, “Towards Photorealistic Reconstruction of Highly Multiplexed Lensless Images”, IEEE International Conference on Computer Vision (ICCV) 2019, Seoul, Korea. (Oral)
PATENT	<ol style="list-style-type: none"> 1. Salman S. Khan, Sanjana Prabhu, Dhruvjyoti Bagadthey, Vivek Boominathan, Ashok Veeraraghavan, Kaushik Mitra, “Reconstructing High Quality Intensity And Absolute Depth From Single-shot Lensless Captures”. Submitted.
HONORS AND AWARDS	<ul style="list-style-type: none"> • Awarded the Qualcomm Innovation Fellowship India 2020-21. • Awarded Google Travel Grant to attend ICCV 2019 at Seoul, South Korea. • National Finalist in NIYANTRA 2017 Annual Student Design Contest
TEACHING EXPERIENCE	Teaching Assistant <ul style="list-style-type: none"> • EE 5176 Computational Photography: Spring 2019, 2021 • EE 6132 Modern Computer Vision: Fall 2020 • EE 1101 Signals and Systems: Spring 2020 • EE 3110 Probability Foundations for Electrical Engineers: Fall 2021
SERVICE	Reviewer <ul style="list-style-type: none"> • IEEE Transactions on Pattern Analysis and Machine Intelligence • IEEE Open Journal of Signal Processing • Optica Optics Express • Optica Continuum
SKILLS	Python(PyTorch, OpenCV), MATLAB, Blender, LabView.