MOHIT LAMBA

Deep Learning for Computer Vision Research Scholar

@ ee18d009@smail.iitm.ac.in +91-9711927555 mohitlamba94.github.io/about-me/ in lambamohit
MohitLamba94 mohit-lamba

EDUCATION & EXPERIENCE

PhD

Computation Imaging Lab, IIT Madras

July 2018 – Present Chennai, Tamil Nadu

Common night-time imaging solutions such as flashlight, NIR and large exposure time tend to cause artifacts, increase equipment cost and may not even be available. My Ph.D. thus focused on designing real-time systems using off-the-shelf DSLR cameras to enable nighttime 3D photography. **CGPA:** 8.79

Internship

Qualcomm

May 2021 – Nov 2021 Banglore, Karnataka

Designing Virtual Reality systems for Qualcomm XR research group.

Post-Graduation

Multimedia Analysis and Security Lab, IIT Gandhinagar

2016 – 2018 Ahmedabad, Gujarat

As part of my thesis, I designed algorithms to ascertain digital images' genuineness and in case of any data falsification, identify the type of tampering done to digital images. **CGPA:** 8.38

BTech

Indraprastha University

2012 – 2016 Delhi

Did my minor and major projects on Voltage Controlled Oscillators. **CGPA:** 8.9

ACHIEVEMENTS & SERVICES

Technology and Startup Funding (TSF) Grant
Received a *Rs. 50,00,000/-* grant under the Technology and Startup Funding (TSF) Government scheme for building and commercialising "Night-time image sensing for increased human perception and Advanced Driver-Assistance Systems"

Research project with *Caterpillar Inc.*
Developed a industrial machinery fault detection system for *Caterpillar Inc.* using thermal cameras.

Reviewer
I frequently review papers submitted to international Journals and Conferences such as IEEE-TIP, ECCV and WACV

PUBLICATIONS

Book Chapter

- *"Residual Domain-Rich Models and their Application in Distinguishing Photo-Realistic and Photographic Images" in Recent Advances in Mathematics for Engineering*. (2020). Taylor & Francis.

Journal Articles

- "Harnessing Multi-View Perspective of Light Fields for Low-Light Imaging". (2021). *IEEE Transactions on Image Processing (TIP)*.

Conference Proceedings

- "Real-Time Restoration of Dark Stereo Images". (2023), In *WACV*.
- "Fast and Efficient Restoration of Dark Light Fields". (2022), In *WACV*.
- "Restoring Extremely Dark Images in Real Time". (2021), In *CVPR*.
- "Multi-Patch Aggregation Models for Resampling Detection". (2020), In *ICASSP*.
- "Towards Fast and Light-Weight Restoration of Dark Images". (2020), In *BMVC*.
- "Augmented data and improved noise residual-based CNN for printer source identification". (2018), In *ICASSP*.

$ Patents

- *"A Method and a System for Enahancing Low Light Stereo Images of a Scene" (202241047023, filed)*". (2022).
- *"Methods and system for real -time restoration of images captured in extreme low-light condition (202141026548, filed)*". (2021).
- *"Restoring Light Field (LF) Views Captured by LF Cameras (202141055779, filed)*". (2021).

TEACHING ASSISTANCE

Deep Learning | Computer Vision | Computational Photography | Signals and Systems | Data Analytics Laboratory

COURSEWORK

Computational Photography | Deep Learning | Linear Algebra | Digital Signal Processing | Machine Learning | 3D Computer Vision | Multimedia Security | Image Processing