

BISHSHOY DAS
Indian Institute of Technology Delhi · Dolby Laboratories · NVIDIA
Whitefield, Bangalore, Karnataka - 560066, INDIA
email: bishshoydas@gmail.com
phone: (+91) 98744 44297
Google Scholar: scholar.google.com/citations?user=xzX0qAIAAAAJ
Website: www.bishshoy.com

EXPERTISE

Tech stack - Python, C / C++, PyTorch, JAX, Docker.
Research stack - Diffusion models, Gaussian splats, Neural Radiance Fields, Vision transformers, State space models, Super-resolution, Model optimization, Generative adversarial networks.

EXPERIENCE

Dolby Laboratories — Senior AI Researcher
Bangalore, Karnataka · May 2023 – Present

I worked on image enhancement, 6DoF video modeling and compression, in-painting advertisement assets using diffusion models.

NVIDIA — System Software Engineer
Pune, Maharashtra · 2016

I developed linux APIs for low-level camera hardware stack on NVIDIA Tegra line of embedded systems.

EDUCATION

PhD — Electrical Engineering
Indian Institute of Technology Delhi · 2017 – 2022
Deep Learning, Convolutional Neural Networks, Pruning, Gradient Analysis, Algebraic Topology.
Thesis - Improvements in Learning Capacities of Convolutional Neural Networks.
GPA - 8.23 / 10

MTech — Electrical and Electronics Engineering
Indian Institute of Technology Guwahati · 2014 – 2016
Signal Processing, Machine Learning, Linear Algebra, Calculus, Probability Theory and Statistics.
GPA - 8.47 / 10

BTech — Electronics and Communications Engineering
Heritage Institute of Technology, Kolkata · 2009 – 2013
GPA - 8.29 / 10

Research Internship
Hiroshima University, Japan · 2018 and 2019
I developed super-resolution algorithms for high FPS cameras.

Graduate Aptitude Test in Engineering (All India Entrance Exam)
Secured a rank of 99.77th percentile across more than 200,000 candidates.

SELECTED PUBLICATIONS

AD-Relight: Training-Free Banner Relighting via Illumination Translation with Diffusion Priors
R Mishra, **B Das**, AV Subramanyam, GM Su
2026 IEEE International Conference on Multimedia and Expo Workshops (ICME-W)

Novel Feature Prediction Using Residual Networks for Planar-Decomposition Based Dynamic Scene Radiance Fields
B Das, GM Su
2025 IEEE International Conference on Image Processing Workshops (ICIP-W)

On Characterizing the Evolution of Embedding Space of Neural Networks using Algebraic Topology
S Suresh, **B Das**, V Abrol, SD Roy
2024 Pattern Recognition Letters (PRL)

Feature Independent Filter Pruning by Successive Layers Analysis
M Mondal, **B Das**, B Lall, P Singh, SD Roy, SD Joshi
2023 Computer Vision and Image Understanding (CVIU)

Edge-Aware Image Super-Resolution Using a Generative Adversarial Network
B Das, SD Roy
2023 SN Computer Science (SNCS)

Altering Backward Pass Gradients improves Convergence
B Das, M Mondal, B Lall, SD Joshi, SD Roy
2023 The 35th International Conference on Software Engineering and Knowledge Engineering (SEKE)

Adaptive CNN Filter Pruning Using Global Importance Metric
M Mondal, **B Das**, SD Roy, P Singh, B Lall, SD Joshi
2022 Computer Vision and Image Understanding (CVIU)

Knowledge Diversification in Ensembles of Identical Neural Networks.
B Das, SD Roy
2022 British Machine Vision Conference (BMVC)