

RESEARCH PRODUCTS

BOOKS AND EDITED VOLUMES

- B.1 Sunil Rao, Sameeksha Katoch*, Vivek Narayanaswamy, Gowtham Muniraju, Cihan Tepedelenlioglu, Andreas Spanias, Pavan Turaga, Raja Ayyanar, Devarajan Srinivasan, “Machine Learning for Solar Array Monitoring, Optimization, and Control”, *Synthesis Lectures on Power Electronics*, Aug 2020.
- B.2 Henry Braun*, Pavan Turaga, Andreas Spanias, Sameeksha Katoch*, Suren Jayasuriya, Cihan Tepedelenlioglu, “Reconstruction-Free Compressive Vision for Surveillance Applications”, *Synthesis Lectures on Signal Processing*, May 2019.
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BOOK CHAPTERS

- Ch.1 Kowshik Thopalli, Niccolo Meniconi, Tamim Ahmed, Sai Krishna Yeshala, Aisling Kelliher, Thanassis Rikakis, Steve Wolf, “Advances in Computer Vision for Home-Based Stroke Rehabilitation”, *Computer Vision: Challenges, Trends, and Opportunities*, edited by Upal Mahbub, Md. Atiqur Rahman Ahad, Matthew Turk, Richard Hartley, CRC Press, July 2024.
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- Ch.5 Pavan Turaga, Rushil Anirudh*, Rama Chellappa, “Manifold Learning”, *Encyclopedia of Computer Vision*, Springer 2020.
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- Ch.14 M. Albanese, P. Turaga, R. Chellappa, A. Pugliese, and V. S. Subrahmanian, “Semantic Video Content Analysis”, in *Video Search and Mining*, Studies in Computational Intelligence, 2010, Volume 287/2010, 147-176, Springer-Verlag.
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- J.1 Eun Som Jeon, Sinjini Mitra, Jisoo Lee, Omik M Save, Ankita Shukla, Hyunglae Lee, Pavan Turaga, ”Ground Reaction Force Estimation via Time-aware Knowledge Distillation,” in *IEEE Internet of Things Journal*, 2025. (Journal Impact Factor: 8.9).
- J.2 Hongjun Choi, Eun Som Jeon, Ankita Shukla, Pavan Turaga, “Intra-class patch swap for self-distillation”, *Neuro-computing*, Volume 645, 2025. (Journal Impact Factor: 6.5).
- J.3 Ankita Shukla, Yamen Mubarka, Rushil Anirudh, Eugene Kur, Derek Mariscal, Blagoje Djordjevic, Bogdan Kustowski, Kelly Swanson, Brian Spears, Peer-Timo Bremer, Tammy Ma, Pavan Turaga & Jayaraman J. Thiagarajan, “On the design and evaluation of generative models in high energy density physics”, *Communications Physics*, vol. 8, no. 14, 2025. (Journal Impact Factor: 5.4).
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- J.12 Avipsa Roy, Trisalyn Nelson, Pavan Turaga, "Functional data analysis approach for mapping change in time series: A case study using bicycle ridership patterns", *Transportation Research Interdisciplinary Perspectives*, Volume 17, Jan 2023 (Journal Impact Factor: 9.75).
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CONFERENCE AND WORKSHOP PAPERS

ECCV, CVPR, ICCV, ICML, BMVC have acceptance rates around 25%.

- C.1 Jisoo Lee, Tamim Ahmed, Thanassis Rikakis, Pavan Turaga, “Automatic Temporal Segmentation for Post-Stroke Rehabilitation: Key Point Detection and Temporal Segmentation Approach for Small Datasets”, at the *Workshop on Computer Vision with Small Data: A Focus on Infants, Toddlers, and the Elderly (CV4Small)*, held in conjunction with WACV 2025.
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- C.3 Shenyuan Liang, Benjamin Beaudett, Pavan Turaga, Saket Anand, Anuj Srivastava, “Learning Geometry of Pose Image Manifolds in Latent Spaces Using Geometry-Preserving GANs”, accepted at *International Conference on Pattern Recognition (ICPR)* 2024.
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- C.5 Xavier Nokes and Pavan Turaga, “Found Value in the Artifice of Semblance: Engaging With Abstraction Within Generative AI and Integration Practice in Psychedelic Assisted Treatment (PAT)”, *International CyberPsychology and CyberTherapy Conference (CYPSY27)*, 2024.
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- C.7 Eun Som Jeon, Rahul Khurana, Aishani Pathak, Pavan K. Turaga, “Leveraging Topological Guidance for Improved Knowledge Distillation”, at the *ICML 2024 Workshop on Geometry-grounded Representation Learning and Generative Modeling (GRaM)* 2024.
- C.8 Baaz Jhaj, Ankita Shukla, Pavan Turaga, Michael Kozicki, “On the impact of pre-training datasets for matching dendritic identifiers using residual nets”, in *Proceedings of the International Workshop on Artificial Intelligence for Signal, Image Processing and Multimedia* 2024.
- C.9 Kowshik Thopalli, Rakshith Subramanyam, Pavan Turaga, Jayaraman J Thiagarajan, “Target-Aware Generative Augmentations for Single-Shot Adaptation”, *International Conference on Machine Learning (ICML)* 2023.

- C.10 Rakshith Subramanyam, Kowshik Thopalli, Spring Berman, Pavan Turaga and Jayaraman J. Thiagarajan, “Single-Shot Domain Adaptation via Target-Aware Generative Augmentations,” *IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP)*, Greece, 2023.
- C.11 Sinjini Mitra, Rakshith Subramanyam, Rushil Anirudh, Jayaraman J. Thiagarajan, Ankita Shukla, Pavan K. Turaga, “Adapting Blackbox Generative Models via Inversion”, *Workshop on Challenges in Deployable Generative AI* held in conjunction with the International Conference on Machine Learning.
- C.12 Rajhans Singh, Ankita Shukla, Pavan Turaga, “Polynomial Implicit Neural Representations For Large Diverse Datasets”, *Proceedings of the IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR)*, 2023, pp. 2041-2051.
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- C.14 Eun Som Jeon, Suhas Lohit, Rushil Anirudh, Pavan Turaga, “Robust Time Series Recovery and Classification Using Test-Time Noise Simulator Networks”, *IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP)*, 2023.
- C.15 Tripti Shukla, Paridhi Maheshwari, Rajhans Singh, Ankita Shukla, Kuldeep Kulkarni, Pavan Turaga, “Scene Graph Driven Text-Prompt Generation for Image Inpainting”, *Workshop on Generative Models for Computer Vision* held in conjunction with the IEEE/CVF Conference on Computer Vision and Pattern Recognition Pages 759-768.
- C.16 John Kevin Cava, Ankita Shukla, John Wyatt Vant, Shubhra Kanti Karmaker, Pavan K. Turaga, Ross Maciejewski, Abhishek Singharoy, “Latent Sequence Generation of Steered Molecular Dynamics”, *ICLR 2023 Workshop on Physics for Machine Learning*.
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