

Kranti Kumar Parida

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University of Bristol *E-mail* : kranti.parida@bristol.ac.uk
United Kingdom *Website* : <https://krantiparida.github.io/>

RESEARCH INTERESTS Computer Vision, Machine Learning, Multimodal Processing

WORK EXPERIENCE **Postdoctoral Researcher**, University of Bristol, UK 08/2023 - present
Research Scientist, TensorTour India Pvt. Ltd. 05/2022 - 06/2023

EDUCATION **Indian Institute of Technology Kanpur, India** 2016 - 2023
PhD in Computer Science
Advisors: Dr. Gaurav Sharma, Prof. Manindra Agrawal

Indian Institute of Technology Kharagpur, India 2014-2016
Master of Technology in Medical Imaging and Informatics
Advisors: Dr. Rajiv R. Sahay, Prof. P. K. Dutta

Silicon Institute of Technology, Bhubaneswar, India
Bachelor of Technology in Electronics and Telecommunications 2009-2013

PUBLICATIONS **Patents**

[1] Gaurav Sharma, Siddharth Srivastava, **Kranti Kumar Parida**. “Methods and systems of noise aware audio visual speech denoising.” *US Patent App. 18/586, 187, 2024* [link](#)

Journals

[1] **Kranti K. Parida**, Siddharth Srivastava, Gaurav Sharma. “Noise Aware Audio-Visual Speech Denoising.” *IEEE Transactions on Multimedia (Under Minor Revision)*, 2025. [pdf](#)

[2] **Kranti K. Parida**, Gaurav Sharma. “Discriminative Semantic Transitive Consistency for Cross-Modal Learning.” *Computer Vision and Image Understanding (CVIU)*, 2022. [pdf](#)

Conferences

[1] T Perrett, A Darkhalil, S Sinha, O Emara, S Pollard, **Kranti Kumar Parida**, K Liu, P Gatti, S Bansal, K Flanagan, J Chalk, Z Zhu, R Guerrier, F Abdelazim, B Zhu, D Moltisanti, M Wray, H Doughty, D Damen. “HD-EPIC: A Highly-Detailed Egocentric Video Dataset.” *IEEE/CVF Conf. on Computer Vision and Pattern Recognition (CVPR)*, 2025. [pdf](#)

- [2] **Kranti Kumar Parida**, Siddharth Srivastava, Gaurav Sharma. “Beyond Mono to Binaural: Generating Binaural Audio from Mono Audio with Depth and Cross Modal Attention.” *IEEE Winter Conference on Applications of Computer Vision (WACV)*, 2022. [pdf](#)
- [3] **Kranti Kumar Parida**, Siddharth Srivastava, Gaurav Sharma. “Beyond Image to Depth: Improving Depth Prediction using Echoes.” *IEEE/CVF Conf. on Computer Vision and Pattern Recognition (CVPR)*, 2021. [pdf](#)
- [4] Pratik Mazumder, Pravendra Singh, **Kranti Kumar Parida**, Vinay P Namboodiri. “AVGZSLNet: Audio-Visual Generalized Zero-Shot Learning by Reconstructing Label Features from Multi-Modal Embeddings.” *IEEE Winter Conference on Applications of Computer Vision (WACV)*, 2021. [pdf](#)
- [5] **Kranti Kumar Parida**, Neeraj Matiyali, Tanaya Guha, and Gaurav Sharma. “Coordinated Joint Multimodal Embeddings for Generalized Audio-Visual Zeroshot Classification and Retrieval of Videos.” *IEEE Winter Conference on Applications of Computer Vision (WACV)*, 2020. [pdf](#)
- [6] Latha H. Narayan, **Kranti K. Parida**, and Rajiv R. Sahay. “Simultaneous blur map estimation and deblurring of a single space-variantly defocused image.” *Twenty-third National Conference on Communications (NCC)*, 2017.

Workshops

- [1] **Kranti K. Parida**, Neeraj Matiyali, Siddharth Srivastava, Gaurav Sharma. “Depth Infused Binaural Audio Generation using Hierarchical Cross-Modal Attention” *Sight and Sound Workshop, CVPR 2021*. [pdf](#)

RESEARCH EXPERIENCE

- University of Bristol** 08/23 - present
 Research Associate
 - Research on multimodal egocentric video understanding with a focus on audio and 3D understanding
- TensorTour India Pvt. Ltd.** 05/22 - 06/23
 Research Scientist
 - Research and implementation of audio-visual speech models for tasks like speech denoising and speech superresolution.
- Indian Institute of Technology Kanpur** 07/16-12/22
 Graduate Research Student
 - Research on multimodal AI, to help machines use different modalities for understanding the task better as done by the humans
- Indian Institute of Technology Kharagpur** 07/15-06/16
 Master Research Student
 - Research on optimization framework for depth and focused image estimation from a stack of microscopic images

All India Institute of Medical Sciences, New Delhi 05/14-06/14
Research Intern

- Worked with real clinical data to segment different layers of OCT images of a region in the foot and generate a 3D model of it.

**TEACHING
EXPERIENCE**

Tutor, *Introduction to Programming*, IIT Kanpur 08/19-11/19
TA, *Introduction to Machine Learning*, IIT Kanpur 08/18-11/18
TA, *Introduction to Natural Language Proc.*, IIT Kanpur 01/18-04/18
TA, *Online Learning and Optimization*, IIT Kanpur 01/17-04/17
TA, *Intro. to Programming*, IIT Kanpur 08/17-11/17, 01/19-04/19

**WORKSHOPS &
CONFERENCES**

European Conference on Computer Vision 2024
Milano, Italy
Winter Conference on Applications of Computer Vision 2022
Waikoloa, Hawaii (Virtual)
Computer Vision and Pattern Recognition 2021
Virtual
Graduate Symposium by Google Research India 2021
Symposium for selected Ph.D. Students in the Asia-Pacific region
Indian Conf. on Computer Vision, Graphics & Image Proc. 2020
IIT Jodhpur, India (Virtual)
Winter Conference on Applications of Computer Vision 2020
Snowmass Village, Colorado, USA
Vision and Sports Summer School 2017
Czech Technical University, Prague, Czech Republic
Summer School on Machine Learning: Deep Learning 2017
CVIT, IIIT Hyderabad, India
Indian Conf. on Computer Vision, Graphics & Image Proc. 2016
IIT Guwhati, India
Indian Workshop in Machine Learning(IwML) 2016
IIT Kanpur, India

**AWARDS &
FELLOWSHIPS**

Recognized as **Outstanding Reviewer** at ICML 2022
Selected for **Doctoral Consortium** at CVPR 2021
Presented my phd research work
Qualcomm Innovation Fellowship 2021 India Finalist
36 teams selected out of 95
Won **Indian Driving Dataset (IDD)** challenge
ICVGIP 2020, India
Travel Grant from Research I Foundation, CSE, IIT Kanpur
Participating and presenting paper at WACV 2020, Colorado, USA
Director's Appreciation Letter for exceptional rating
as a Tutor in the course of Fundamentals of Computing (2019-20, Sem.-I)

Visvesvaraya PhD Fellowship, 2016-21
Ministry of Electronics & IT, Government of India
Post Graduate Fellowship for M.Tech, 2014-16
AICTE, Govt. of India

**PROFESSIONAL
ACTIVITIES**

Organizer, ICVGIP Contest 2021
Reviewer, ICASSP '24; Eurographics '24; TAPMI '23; CVPR '24, '23, '22; ICCV '23, ECCV '24, ICML '22; WACV '25, '24, '23, '22; AAAI '22; ICPR '22
Public Repository, Maintaining awesome audio-visual list @ github [link](#)
Collection of audio-visual papers accepted at major conferences and journals
Student Volunteer, International Confernece on Systems in Medicine and Biology 2016, IIT Kharagpur, India
Volunteer, Machine Vision and Learning Spring School 2016, Dept. Of Electrical Engg., IIT Kharagpur
Member, Student Activity Committee, IEEE Engineering in Medicine and Biology Student Club, IIT Kharagpur, 2015-16

**TALKS &
SEMINARS**

Making Computers Intelligent: The Way Forward July 2024
Invited Talk, Institute Lecture Series
Kendrapara Auto. College, Odisha, India
ML for audio-visual processing Nov. 2023
Faculty Development Programme on **Recent trends in Machine Learning for Engineering Applications**
Organized by Vellore Institute of Technology, Vellore, India
Audio-Visual Binauralization Jan. 2022
Presented Poster and Short Talk
WACV 2022, Virtual
Beyond Image to Depth Dec. 2021
Invited Talk
ICVGIP 2021, Virtual
Audio-Visual Depth Estimation June 2021
Presented Poster and Short Talk
CVPR 2021, Virtual
Basics of PyTorch and CNN Jan. 2021
Faculty Development Programme on **Optimization and Deep Learning**
Organized by NIT Patna & Techno Main Salt Lake, Kolkata, India
Audio-Visual Zero-shot Learning Feb. 2020
Presented Poster and Short Talk
WACV 2020, Colorado, USA

**TECHNICAL
SKILLS**

Python, PyTorch, C/C++, MatLab, L^AT_EX

REFERENCES

Available upon Request