Kranti Kumar Parida

CONTACT INFORMATION	School of Computer Science University of Bristol United Kingdom	*Phone :* +44-7741901563 *E-mail :* kranti.parida@bristol.ac.uk *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

Journals

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

Conferences

[**5**] **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

[**4**] **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

[**3**] 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

[**2**] **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

[**1**] 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

Indian Institute of Technology Kanpur   07/16-present
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

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	
Summer School on Recent Advances in Computer Vision	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; ICML '22; WACV '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	**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, LaTeX

REFERENCES   Available upon Request