

ID	POSTER TITLE	Authors	Primary contact
37	Simulation of Monthly Global SST Data Using Ensemble Pix2Pix cGAN	Deepayan Chakraborty (PhD scholar at Dept. of AI), Dr. Adway Mitra (Assistant Professor at Dept. of AI)	deepayanc@iitkgp.ac.in
38	SAR-Foundation: Toward Foundation Models Using Complex Vision Transformers for SAR	Aashutosh Joshi – SPAI Group, Department of Artificial Intelligence, IIT Kharagpur	aashutoshjoshi01@kgpian.iitkgp.ac.in
39	Assessment of Time-Varying Flood Proneness and related Risk using Geospatial and Climatic Features through Advanced Machine Learning Approaches	Triveni Majhi, Abhirami V, and Rajib Maity	triveni23@kgpian.iitkgp.ac.in
40	KlearVisen: Real-Time Fog and Rain Removal from Video	Abinas Chopdar (RS), Abhirup Giri (BTech DD)	abinaschopdar@kgpian.iitkgp.ac.in
41	Multi-Representation Fusion of Complex SAR Domains for Improved Land Cover Classification	Nipun (IIT KGP), Neha, Mahesh	nipunbharadwaj@kgpian.iitkgp.ac.in
42	Real-Time IoT-Based Sap Flow Sensor for AI-Enhanced Crop Health Monitoring	Mr. Ambuj Prof. Rajendra Machavaram Agricultural and Food Engineering Department Indian Institute of Technology Kharagpur, West Bengal-721302	pathakambuj@kgpian.iitkgp.ac.in
43	Machine learning based modeling for groundwater salinity-a case study on Israel	1. Laxmi Pandey (Department of Artificial Intelligence, Indian Institute of Technology Kharagpur, Kharagpur, West Bengal 721302, India 2. Adway Mitra (Department of Artificial Intelligence, Indian Institute of Technology Kharagpur, Kharagpur, West Bengal 721302,	adway@cai.iitkgp.ac.in
44	Future of Water: A Deep Learning-based Assessment and Climate Sensitivity Analysis	Subharthi Sarkar, Mohd. Imran Khan and Rajib Maity Department of Civil Engineering, Indian Institute of Technology Kharagpur, West Bengal, India	subharthisarkar5@iitkgp.ac.in
45	WAQABOS: An AI-Based Autonomous System for Real-Time Surface Water Quality Monitoring and Assessment	Prasad M M -Tech Agriculture and food engineering Department IIT KGP Sk Abdul Selim M -Tech Agriculture and food engineering Department IIT KGP	shivaprasadlwr.24@kgpian.iitkgp.ac.in
46	Correcting bias of real-time satellite precipitation products using Geostatistical and Deep learning techniques for the Eastern India River Basin	Roshan Suryakant Mohanty, School of Water Resources, IIT Kharagpur Prof. Bhabagrahi Sahoo, School of Water Resources, IIT Kharagpur Prof. Chandranath Chatterjee, Department of Agricultural and Food Engineering, IIT Kharagpur	roshanmohanty@kgpian.iitkgp.ac.in
47	Artificial Intelligence Applications for Managing Extreme Weather Risks in Port Operations	Bhuvan Arora and Anwesha Aditya Department of Humanities and Social Sciences, Indian Institute of Technology Kharagpur	arorabhuvann@kgpian.iitkgp.ac.in
48	FORECASTING DAILY AND REAL-TIME VARIATIONS IN AIR QUALITY ACROSS URBAN CITIES IN INDIA UTILIZING A DESIGNED MACHINE LEARNING MODEL	VYSHNAVI K K and SHUBHA VERMA, Indian Institute of Technology Kharagpur	vyshnavi1996anju@kgpian.iitkgp.ac.in
49	Real-Time Flash Flood Nowcasting for Indian Metros	ASMITA RAJPUT (Techno Bengal Institute of Technology) DEBDEEP MAHAPATRA (Techno Bengal Institute of Technology)	asmitarajput0510@gmail.com
50	Spatiotemporal bias correction of real-time satellite rainfall estimates using Geostatistical and Deep Learning techniques for the Eastern India River Basin	Roshan Suryakant Mohanty, School of Water Resources, IIT Kharagpur Prof.Chandranath Chatterjee, Agricultural and Food Engineering Department, IIT Kharagpur Prof. Bhabagrahi Sahoo, School of Water Resources, IIT Kharagpur	roshanmohanty@kgpian.iitkgp.ac.in
51	AI for Fuel Discovery: Chemical Space Optimization of Sustainable Aviation Fuels Using MLIP	Sandip Giri (PhD Scholar, Chemistry, IITKGP), Anoop Ayyappan (Professor, Chemistry)	sg.chem4@kgpian.iitkgp.ac.in
52	Framework for Classification and Quantification of Distresses in Pavements using Machine Learning	Col. Karan Sharma(PG, Civil Engineering Department), Satyarth Kumar Keshri (UG, Civil Engineering Department), Kranthi Kumar Kuna (Associate Professor, Civil Engineering Department)	satyarthkeshri99@kgpian.iitkgp.ac.in
53	Cloud-based Adaptive Multi-Branch Object Detection	Abhra Majumder, Nirmalya Ghosh, Anirban Mukherjee, and Siddhartha Mukhopadhyay	abhrasky@iitkgp.ac.in
54	Comparative analysis of Regression with ARIMA and PI-RNN models for Predicting IGBT Remaining Useful Life using Switch Health Index Embedding Feature Reconstruction approach	Hiteshree Suresh Sakhare, Heeralal Gargama Subir Chowdhury School of Quality and Reliability, IIT Kharagpur, Kharagpur-721302, India	hiteshreesakhare@kgpian.iitkgp.ac.in
55	Future of Household Statistics Automating Prediction of Household and Village Level Indicators	Dr. Tutan Ahmed, Raunak Pal IIT Kharagpur	tutan@vgsom.iitkgp.ac.in
56	Real time roadside hazard detection in an urban junction	Individual	drishtidevi102925@kgpian.iitkgp.ac.in
57	AI-Powered Virtual Trade: Unlocking 24/7 Global Services Through ICT Synergies and Time Zone Arbitrage	Arundhati Sinha Roy - PhD Research Scholar, Department of Humanities and Social Sciences, IIT KGP Dr. Anwesha Aditya - Assistant Professor, Department of Humanities and Social Sciences, IIT KGP Dr. Siddhartha Chattopadhyay - Associate Professor, Department of Humanities and Social Sciences, IIT KGP	arundhatisroy@kgpian.iitkgp.ac.in
58	Decoding Urban Network Hierarchies with AI	Vimal Kumar Arulmozhi, ARP, IIT Kharagpur Shreyas Pramod Bharule, ARP, IIT Kharagpur	ar.vimalkumar1995@kgpian.iitkgp.ac.in
59	From Scarcity to Robustness: Generative AI for Imbalanced and Incomplete Scientific Data	Anmol Singh Akshat Agarwal Jishnu Mukherjee Aman Sinha Anurag Singha This Project was carried out under the Guidance of Prof. Subhajit Sidhanta	anmolsingh292003@kgpian.iitkgp.ac.in
60	Application of Generative AI For Urban Road Junctions Assessment: A Case Study Safety	Atharva Sanjay Deshmukh M.Tech Scholar Centre of Excellence on Safety Engineering and Analytics (CoE-SEA) IIT Kharagpur Laxman Singh Bisht Assistant Professor Centre of Excellence on Safety Engineering and Analytics (CoE-SEA) IIT Kharagpur	atharvadeshmukh1725@kgpian.iitkgp.ac.in
61	Wide2Long: Learning Lens Compression and Perspective Adjustment for Wide-Angle to Telephoto Translation	Soumyadipta Banerjee, Jiaul H. Paik, Debashis Sen. Presenter: Soumyadipta Banerjee and Ankan Das	dsen@ece.iitkgp.ac.in
62	Zero-shot Single Image Restoration through Controlled Perturbation of Koschmieder's Model	Aupendu Kar, Sobhan Kanti Dhara, Debashis Sen, Prabir Kumar Biswas. Presenter: Ankan Kumar Das.	dsen@ece.iitkgp.ac.in
63	Setting the Course, but Forgetting to Steer: Analyzing Compliance with GDPR's Right of Access to Data by Instagram, TikTok, and YouTube	Sai Keerthana Karnam (IIT Kharagpur), Abhisek Dash (MPI-SWS) , Antariksh Das (IIT Kharagpur), Sepehr Mousavi (MPI-SWS), Stefan Bechtold (ETH Zurich) , Krishna P. Gummadi (MPI-SWS), Animesh Mukherjee (IIT Kharagpur), Ingmar Weber (University of Saarland), Savvas Zannettou (TU Delft)	saikerthanakarnam.24@kgpian.iitkgp.ac.in
64	Applying Dynamic Mode Decomposition for LLM Interpretability	Amogh Joshi, Professor Animesh Mukherjee (IIT Kharagpur), Professor Sergey Utyuzhnikov (University of Manchester)	amoghjoshi25@kgpian.iitkgp.ac.in
65	Deep Learning-Based Collision Warning System for Pedestrian Safety at Zebra Crossings	Arham Shaikh, Civil Engineering Department, Indian Institute of Technology Kharagpur,West Bengal, India, 721302 Sayanton Mohanta, Civil Engineering Department, Indian Institute of Technology Kharagpur,West Bengal, India, 721302 Dr Madhumita Paul, Civil Engineering Department, Indian Institute of Technology Kharagpur,West Bengal, India, 721302	arhamshaikh.24@kgpian.iitkgp.ac.in
66	Smart AI Solutions for Automated Capsicum Harvesting Using YOLO	Ayan Paul, Research Scholar, IIT Kharagpur	ayanpaul2210@kgpian.iitkgp.ac.in
67	AI/ML for Oil/Gas and coal reservoirs: Application of meta-learner ensembles to neuro-symbolic AI with deep learning	Rupam Roy, Lاراib Abbas, Dip Kumar Singha Department of Geology and Geophysics, Indian Institute of Technology Kharagpur, West Bengal-721302, India	royrupam964@kgpian.iitkgp.ac.in
68	Semantic Segmentation of Google Street View Images for Measuring the Street-Built Environment	1. Anubhav Kumbhre, Research Scholar, Department of Architecture and Regional Planning, IIT Kharagpur 2. Shreyas Bharule, Assistant Professor, Department of Architecture and Regional Planning, IIT Kharagpur	anubhavgkumbhre@kgpian.iitkgp.ac.in

ID	POSTER TITLE	Authors	Primary contact
69	Toward Grounded YOLO-SAM: Unified Detection – Segmentation Framework for Agricultural Intelligence	Pooja Verma, Research Scholar, Indian Institute of Technology Kharagpur. Rajendra Machavaram, Associate Professor, Indian Institute of Technology Kharagpur. Mahua Bhattacharya, Professor, ABV-Indian Institute of Information Technology and Management Gwalior.	pverma@kgpian.iitkgp.ac.in
70	Application of Generative AI to predict Road User’s Behaviors on Hilly Roads: A Concept	Albert lohe & Laxman singh bisht	Alotoalbertlohe25@kgpian.iitkgp.ac.in
71	AI-Vahan: Enhancing Rural Mobility and Transportation with Real-Time Road Monitoring	Prashant Sireesh : Research Scholar, Dept. of Architecture & Regional Planning, IIT Kharagpur Dr. Shreyas P. Bharule : Assistant Professor, Dept. of Architecture & Regional Planning, IIT Kharagpur Dumasia Kehkasha Fatema Ahmedbhai : Research Scholar, Dept. of Architecture & Regional Planning, IIT Kharagpur	sireesh@kgpian.iitkgp.ac.in
72	Application of Machine Learning in Screening the Optimal Enhanced Oil Recovery Technique	Atman Madhumaya, Deysarkar Centre of Excellence in Petroleum Engineering, Indian Institute of Technology Kharagpur, India Akshay Chandan Dey, Deysarkar Centre of Excellence in Petroleum Engineering, Indian Institute of Technology Kharagpur, India Aditya Vyas, Deysarkar Centre of Excellence in Petroleum Engineering, Indian Institute of Technology Kharagpur, India	atmanmadhumaya@kgpian.iitkgp.ac.in
73	Constant Time Decision Trees and Random Forest	Maddimsetti Srinivas	maddimsetti34@gmail.com