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CALL FOR PAPER

Special Session

on

“Explainable AI for Computer Vision”

in

International Conference

on

Technological Advancements in Computational Sciences

(ICTACS-2022)

10th – 12th October 2022

at

**Amity University, Tashkent City. Street Labsak, Building-70, 100028,
Uzbekistan.**

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All accepted & presented papers of the Conference by duly registered authors, will be submitted to [IEEE Xplore](#) Digital Library for Inclusion.

Session Chair:

- **Prof. (Dr.) Vandana Sharma, Professor, Galgotias University, U.P, India**
- **Dr. Balamurugan Balusamy, Associate Dean -Students, Shiv Nadar University, Delhi- NCR, India**
- **Prof. (Dr.) Fadi Al-Turjman, Associate Dean for Research, Head of the Artificial Intelligence Engineering Dept., Near East University, Nicosia**

Important Weblinks:

- To visit Conference Website, [click here](#)
- For Research Paper Submission, [click here](#)
Research Paper/ Article/ Manuscript will be submitted through [EasyChair](#) only.
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- To view special session details, [click here](#)
- To view Instruction to Authors, [click here](#)

Important Dates:

Paper Submission Deadline:	06-July-2022
Notification of Acceptance:	20-August-2022
Camera Ready Paper Submission Deadline:	10-September-2022
Last Date of Registration:	20-September-2022
Conference Date:	10 th – 12 th October 2022

[Amity University](#) is research driven University which offers higher education in diverse field from Engineering, Management, Life Sciences, Applied Science and the like. Amity University provides quality platform for research in field of Academics. The campus is organizing International Conference on Computation, Automation and Knowledge Management on 10th – 12th October 2022.

This Conference includes many topics which were deeply deliberated, and which brewed new ideas. Thus, giving rise to new avenues for researcher. We aim to take those concepts further to derive fresh hypothesis and arrive at the logical deductions. The participation of scientist from across the globe was very encouraging in our last conferences organized in India. This time we are anticipating even larger congregation from more diverse domains as we are reaching out too many eminent philosophers, thinkers and academicians from scientist fraternity.

Aim and Scope:

Artificial Intelligence is irreplaceable in leveraging all the benefits of man-machine interactions. There is an ever-growing need to simulate human behavior and to adapt to the needs of converging technologies like Big Data Analytics, Cloud Computing, and IoT. Computer Vision is a field of AI for analyzing images with a high degree of accuracy. Implementation of techniques for the amalgamation of human images and deriving specialized knowledge is a challenging task. Explainable AI for Computer Vision supports the decision-making process and brings transparency and fix accountability to the entire process. Another important aspect of Computer Vision is to adapt human facial recognition for detecting emotions. There is a need to incorporate explainable AI to personalize and identify human interaction styles and emotions. Also, natural language processing is much needed for the predictions of human behavior and explanation. Time and again emerging need for a medical domain-specific intelligent expert system to classify human skin. The application is achieved by applying deep neural networks and XAI for the skin classifier. XAI implementation is possible with a framework, scientific interpretability and performance evaluation metrics.

The Special Session invites authors from broad disciplines like Explainable Artificial Intelligence to establish a smart computing framework and facilitates behavioral science computing. Applying Intelligent decision-making with the help of face recognition, feature recognition, emotion recognition, and gesture recognition for simulating human behavior in the virtual world has seen many applications.

The special session will include the following broad topics, but are not limited to:

Sub-themes (but not limited to):

- Trust Challenges and Issues faced by XAI for Computer Vision
- Implementing Explainable, Understandable, Responsive AI for Intelligent Computer Vision for Smart Cities
- Digital Twin based Methods, Tools and Frameworks for XAI-based Computer Vision for Medical Imaging and Sensors
- Open-Sourced Visualization Tools for XAI and ML based Black Box using Deep Learning Models for Computer Vision
- Evaluation Tools for XAI for Computer Vision
- Understanding XAI for Understanding for Deriving Real Time Results from HCI
- Interpreting Human Modelling and its Behaviour for Domain-Specific Explainable AI
- Implementing XAI-based Computer Vision for Monitoring, Detecting, and Analysing Cyber Physical Systems
- Detecting Pest in Agricultural Field via Computer Vision for Agri 4.0
- Explainable AI-based Computer Vision Solutions for Smart Manufacturing in Industry 4.0
- Advances in Diagnosis, Analysis, and Prediction in Health Sector using XAI enabled Computer Vision
- Simulating Autonomous Vehicles using XAI based Computer Vision
- Open-Sourced Platforms, IDE for XAI based Computer Vision
- Popular Use Cases and Case Studies for XAI in Computer Vision

Note: It is a mandatory requirement that all papers submitted for this session must be e-mailed to vandana.sharma@galgotiasuniversity.edu.in along with [EasyChair](#) submission.

In case of any query, please write to us on:
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