



**AMITY
UNIVERSITY**

CALL FOR PAPER

Special Session

on

***“Federated Learning-Based Computing for Internet of
Medical Things (IoMT)”***

in

International Conference

on

Computation, Automation and Knowledge Management

(ICCAKM-2022)

15th – 17th November 2022

at

**Amity University, Dubai International Academic City, Dubai, United Arab
Emirates.**

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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:

- **Dr. Vandana Sharma, Professor & Head of Wireless Networks Research Group, Galgotias University, India.**
- **Dr. Balamurugan Balusamy, Associate Dean Student Engagement, Shiv Nadar University, India.**
- **Dr. Sherali Zeadally, Professor, University of Kentucky, USA.**

Important Weblinks:

- To visit Conference Website, [click here](#)
- For Research Paper Submission, [click here](#)
Research Paper/ Article/ Manuscript will be submitted through [EasyChair](#) only.
If you don't have [EasyChair](#) account, please [create](#) one.
- To view special session details, [click here](#)
- To view Instruction to Authors, [click here](#)

Important Dates:

Paper Submission Deadline:	15-July-2022
Notification of Acceptance:	30-July-2022
Camera Ready Paper Submission Deadline:	15-August-2022
Last Date of Registration:	15-August-2022
Conference Date:	15 th – 17 th November 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 15th – 17th November 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:

The functioning of the Healthcare industry is changing and most of the practices involve wearable sensors. In the present scenario, wearable sensors are currently being used by medical experts to monitor, diagnose and prevent lifestyle diseases. These wearable sensors are capable of communicating and generating big data for the Internet of Medical Things (IoMT). Currently, the data so generated is accumulated and processed on the centralised cloud. However, the machine learning approaches cannot be applied well. Thus, there is a need for federated learning from fog nodes to facilitate real-time diagnoses and the prevention of diseases for the development of sustainable societies. The recent development of federated learning also known as collaborative learning has faced issues like privacy, security, networking and management of sensor data in heterogeneous networks of distributed set-up. The call of this special session invites novel, original, innovative submissions on federated learning for the Internet of Medical Things (IoMT).

Submissions of research paper / articles, original manuscripts are welcomed.

Sub-themes (but not limited to):

- Pervasive learning of federated data from remote healthcare systems
- Service management systems for IoMT
- Sustainable practices based on collaborative learning for IoMT
Health monitoring and disease predictions based on socially aware federated learning through Web 3.0
- Patient behavior analysis and social health predictions through IoMT
Optimization of supervised and unsupervised machine learning algorithms in IoMT
- Bio-Inspired evolutionary computing for remote health monitoring
Green computing-based lightweight algorithms for federated learning in IoMT
- Framework for remote and robot-assisted surgery in IoMT
- AI-enabled service management in mobile hospitals
- Data analytics of medical diagnostics centers through IoMT
- Convergence of ML, IoT, and fog computing for federal learning based IoMT
- Use cases and case studies of federated learning-based applications
Remote monitoring systems for federated learning across medical diagnostics centers
- Multi-dimensional data processing and analysis for big data in IoMT

Note: It is a mandatory requirement that all papers submitted for this session must be e-mailed to vandana.juyal@gmail.com, kadavulai@gmail.com, szeadally@uky.edu along with [EasyChair](#) submission.

In case of any query, please write to us on:
vandana.juyal@gmail.com, kadavulai@gmail.com,
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