



**Dept. of Computer Science and Engineering
Indian Institute of Technology Patna**

(Online) HACKATHON:

5G Slicing: Application in UAV



5G Slicing: Application in UAV

September 18-21, 2021

Coordinators

Dr. Rajiv Misra, IIT Patna

Dr Asif Ekbal, IIT Patna

Important Dates

Hackathon dates: Sept. 18-21, 2021

Last date of Registration : 16th Sept, 2021

Confirmation and Invitation link : 17th Sept, 2021

ABOUT IIT PATNA Indian Institute of Technology Patna is one of the new IITs established by an act of parliament on August 06, 2008. IIT Patna is an autonomous institute of education and research in science, engineering, and technology located in Patna, India.

CHALLENGE DESCRIPTION

- 5G Network Slicing with application vertical UAVs
- 5G MEC and application vertical UAVs
- 5G Network Slicing and Virtualization
- 5G Slicing for UAV Applications in Industry, Agriculture, Disaster-Management
- 5G Network Slicing: AI , Machine Learning
- 5G Network Slicing: Reinforcement Learning
- 5G Network Slicing using IoT, Fog and Edge

IIT PATNA 5G NETWORK SLICING PROJECT

The R&D Project on 5G Network Slicing is sponsored by MeitY, Govt of India. The aim of competition is to provide innovation challenge in 5G Network Slicing technologies and infrastructure, and Network Slicing supporting application verticals using eMBB (enhanced Mobile Broadband), mMTC (massive Machine Type Communications), URLLC (Ultra Reliable Low Latency Communications) with UAV applications. 5G network slices with Unmanned Aerial Vehicles (UAV) equipped with multi-access edge computing (MEC) facilities using AI/ML/Reinforcement Learning. The architecture and possible applications of UAVs in the frame of a 5G (& Beyond) network supporting network slicing and lightweight virtualization.

BROAD SCOPE HACKATHON

This challenge is to provide platform to innovative technologies for 5G Network Slicing services and application using concepts of AI/ML for next-generation innovations of industry use-cases. The topics will focus on applications to benefit society using innovative technologies for people from practioners, professionals, engineers, industry and academic/research communities associated with the multi-disciplines of Computer Science, Electrical, and Electronics etc

ORGANIZING COMMITTEE

Prof. Pramod K Jain	Director IIT Patna
Dr. Jawar Singh	Associate Dean R&D
Dr. Rajiv Misra	PI
Dr. Asif Ekbal	Co-PI

Panel of Experts for competition (tentative)

Dr B.M.Baveja(MeitY), Prof Kiran Kuchi(IIT Hyd), Prof Bheemarjun Tamma Reddy(IIT Hyd), Dr Antony Franklin(IIT Hyd), Dr Rajiv Misra, Dr Asif Ekbal, and experts from IITs and Industry

TARGET PARTICIPANTS

The Hackathon participation is suitable for Students, Startups, Professionals, NGOs, Engineers/Scientists, Govt. officers, Faculty members interested in the 5G technologies for Smart- services and industrial applications using AI/ML/Reinforcement Learning for advance potential applications.

HACKATHON REGISTRATION

There is **no participation fees.**

The participation team will be adjudged by Experts and Participants will be Awarded with **Prizes** and certificate. **Winner** of competition will Awarded with **Prize Money**.

REGISTRATION LINK

Registration link (Google Form): (OPEN)
<https://forms.gle/Ys1J4bfSthJC8hNM9>

For any query please write to: Rohit Kumar Gupta (Phd Scholar) at rohit10495@gmail.com, and rajivm@iitp.ac.in