IFET COLLEGE OF ENGINEERING
EXTERNAL LEVEL STUDENTS' SYMPOSIA
IFET MINDSPARKATHON'19
DEPARTMENT OF CSE

Problem Domain:

- **Smart City: Digital Connectivity and Smart Mobility**
  Mobility is set to change such asfrom multimodal travel to flying taxis, in the process of completely reinventing how people are moved.While we come toknow that everything is about to change, we still need to figure out how that makes mobility one of the most exciting area in technology today. These new technologies and integrations are based on sensor-centered collection and analysis of data. They offer cost-effective and innovative solutions to the growing number of challenges faced by society.

- **Early Disease Detection & Screening (cancer screening, heart disease screening, neurological screening etc)**
  Early diagnosis aims reducing the proportion of patients who are diagnosed at late stage. Improving disease diagnosis demands constant, potentially radical innovation. A system with proper methodologies is needed that make easier to find patterns and relationships among large amounts of patient data. Analyzing big data helps to identify which patients are most at risk for various disease and how the disease affects people daily and over time.

- **Development of contextual learning platforms to assist doctors on analyzing patients**
  Modern medicine is very complex and recent reports have pointed out that the issue of patient safety is a major problem.A error done by a doctor may ruin the life of patient, to learn from these kind of error or to avoid it learning is vital. Contextual learning is based on a constructivist theory of teaching and learning. In health care, learning to improve quality and safety needs to occur at the individual, team and organisational levels. A IOT or AR/VR system is to be developed to provide such a platform to doctors that supports them in right direction for diagnosing patient.

- **Cashless Village Solutions**
  There are many challenges to overcome to get a digital makeover in rural village such as enhancing access to banking and providing seamless banking services, leverage technology in the social sectors for improvement in the lives of the villagers and to create enabling infrastructure to make technology available and access and disseminate information. While there is some progress to overcome these challenges, can we build smart cashless villages? Towards this end and to facilitate safe and secure options of cashless transaction let's build an intelligent Payment solution to facilitate and paying digitally for utility bill payments, transport, public facilities, shopping and entertainment.

- **Data Analytics solutions**

Every second we create new data. we perform 40,000 search queries every second (on Google alone), which makes it 3.5 searches per day and 1.2 trillion searches per year.

The financial services industry has a vast reservoir of data on their customers, but is in the infancy stage of utilizing this data for financial or competitive gain. System is to be developed that would be a solution to help you succeed in the digital age by managing and analyzing from data.

➢ **Cyberbullying Prevention &Transaction Support**

This is need of time with growing Transactionsas we can't imagine how users are increased over mobile applications, Social Media, Payments etc areas. Eye on Cyber Security will be key in 2020.

60% Innovations in India are around Payments. We are seeing many Mobile Apps for payment but without safe transaction. Let's build an innovative and secured Payment Experience on Mobile Application.

➢ **New and innovative way for users to view or create entertainment/media**.

The Augmented Reality / Virtual Reality & Gaming Hackathon will focus on the next generation of software, applications and technologies applied to Augmented and Virtual Reality (AR/VR).Augmented Reality (AR) and Virtual Reality (VR) bring up a lot of challenges to technologies such as information display, image processing, fast computing and networking. As it is a emerging field projects and innovative ideas from this area is in great concern such as Devising to deliver an AR/VR experience that would expand and magnify the human interaction experience across the business, learning methodologies,etc.