

Webinar on Healthcare IoT The Fifth Edition

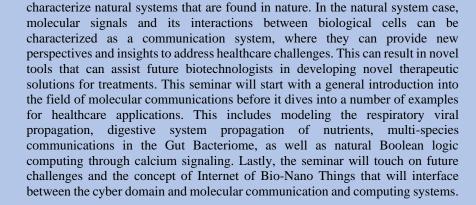


IEEE Communication Society Technical Committee on eHealth: Special Interest Group on "IoT for eHealth" and

Technical Committee Green Computing and Communications: Special Interest Group on "Pandemics"



Dr. Sasitharan Balasubramaniam Associate Professor School of Computing College of Engineering University of Nebraska-Lincoln Lincoln, NE 68588-0115



Title: Molecular Communications as a Novel Avenue for Future Healthcare

Abstract: The emerging field of molecular communication aims to create artificial communication systems from biological components as well as

Title: AI/ML Applications in Digital Health

Abstract: In recent years we are working on developing several AI-based assistants to help improve the physical and mental health issues of common people of the society. In order to support telemedicine facilities, we have developed some virtual doctors which can conduct symptom investigations and can replace junior doctors in a hospital. In general in a hospital, when patients report, firstly a junior doctor used to conduct a symptom investigation by asking some relevant questions, and finally, a senior doctor takes the decision about the illness based on the symptoms investigated. We have developed a virtual doctor with the support of AL, ML, and NLP techniques which can conduct symptom investigation. This conversational agent is capable of detecting symptoms either from textual responses of the patients or the images shown by the patient. I will discuss about the research challenges faced during this virtual doctor development in the first part of my talk. Second part of my talk will discuss the research challenges faced for the development of a motivational chat-bot which will act as the first point of contact for patients suffering from mental distress. This conversational agent generates emphatetic and motivational utterances to help in boosting the morale of the patients who are suffering from some mental disorders.



Dr. Sriparna Saha Associate Professor Department of Computer Science and Engineering Indian Institute of Technology Patna Bihta, Patna -801103, Bihar, India

Title: 6G: Industrial AI Perspectives

Abstract: Intelligence is the ability to model our thinking and sensing processes through various intelligent models. In industrial AI, engineers develop and deploy AI algorithms consistently and systematically to achieve repeatable and consistent results. Therefore, in this talk, I will explain the different trends of Industrial AI and how it is different from Industry 4.0. Moreover, different societal versions will explain in comparison with Industrial AI. In the end, other vital challenges and use case will be described. In addressing the real-world implementation of Industrial AI, this research will guide and roadmap for researchers and industries



Dr. Shahid Mumtaz CEng, FIET, SMIEEE Instituto de Telecomunicações (IT) Portugal

Hosts: Dr. Arijit Roy, IIIT Sri City, India Dr. Ayan Mondal, IIT Indore, India Mr. Kounteya Sarkar, IIT Kharagpur, India Prof. Sudip Misra, IIT Kharagpur, India

More details can be found here Date: October 16, 2022 Time: 5:00 PM - 7:00 PM, Indian Time (IST)

