

AI Solutions for COVID-19 and current medical imaging in Smart-Cities

COVID-19, known as the Corona Virus Disease 19, is a disease which created a significant impact by being a cause of death to the majority of the deceased population of the world in 2019-2020. The primary source for the transmission of the disease, detection and treatment methods are still unknown. Lots of the details about this virus is still missing. How it spreads, prevention measures and vaccinations issues need to be further investigated. In this field, Artificial Intelligence (AI) and computer-assisted paradigms can play a key role in achieving many effective and efficient solutions. Such intelligent techniques can achieve very effective diagnosis for the COVID-19 and alike diseases in the biomedical field by even being better than physicians. It can examine extended counts of the possibilities and exchange the found results in timely manners. Current smart cities infrastructure includes a number of smart devices having the sensing and data routing capabilities to communicate with each other using various protocols, allowing the disease updates to be accessed any-time from anywhere. They have the potential to provide innovative services which could not be possible without the progress made in the AI field.

This venue aims to solicit original research articles, which contributes to the current state of the art by reporting results for the used AI techniques in the problem scope of computer networks-assisted COVID-19 and alike diagnosis. It will shed the light on potential mobile Internet, big data, artificial intelligence, cloud computing and other modern information technology that can build the required online and cost-efficient medical service platforms.

Topics

Topics of interest include, but are not limited to, the following scope:

- AI in the Internet of Medical Things (IoMT)
- AI in IoT-oriented medical applications
- AI and IoT paradigms in sustainable education systems
- AI/IoT solutions in smart cities traffic systems
- Deep Learning for COVID-19 and alike diagnosis
- Neural Network for medical diagnosis
- AI-oriented Internet hospital and online diagnosis
- Collaboration of Image Progressing and ML for COVID-19 and alike diagnosis
- Collaboration of Computer Communication and ML for COVID-19 and alike diagnosis,
- AI and ML in Medical and Critical applications
- Use cases of computer-assisted COVID-19 and alike detection systems,
- COVID-19 Patient Care and Treatment using ML-oriented systems,
- Emerging Networks solutions for improved medical diagnosis results,
- Intelligent Hardware solutions for COVID-19 and alike diagnosis,
- Effective use of computer communication and ML for solving open medical problems,
- Next Generation Networks (NGNs) and ML solutions for medical diagnosis.
- Security and privacy aspects in medical diagnosis.

Important Dates

- Manuscript submission deadline: 2nd Jan 2022
- Notification of acceptance: 3rd April., 2022
- Submission of final revised paper: 5th July., 2022
- Publication of special issue (tentative): 4th Sep., 2022

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Dr. Achyut Shankar is currently working as an Assistant Professor in Amity University, Noida, India. He obtained his PhD in Computer Science and Engineering majoring in wireless sensor network from VIT University, Vellore, India. He has published more than 60 research papers in reputed international conferences & journals in which 35 papers are in SCIE journals. He is a member of ACM and has received research award for excellence in research for the year 2016 and 2017. He had organized many special sessions with Scopus Indexed International Conferences worldwide, proceedings of which were published by Springer, IEEE, Elsevier etc. He is serving as reviewer of IEEE Transactions on Intelligent Transportation Systems, IEEE Sensors Journal, IEEE Internet of Things Journal, ACM Transactions on Asian and Low-Resource Language Information Processing and other prestigious conferences. His areas of interest include Wireless sensor network, Machine Learning, Internet of Thing, Block-chain and Cloud computing.

1. **2. Dr Keping YU (Lead Guest Editor)**
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Keping Yu (Member, IEEE) received the M.E. and Ph.D. degrees from the Graduate School of Global Information and Telecommunication Studies, Waseda University, Tokyo, Japan, in 2012 and 2016, respectively.,He was a Research Associate and a Junior Researcher with the Global Information and Telecommunication Institute, Waseda University, from 2015 to 2019 and 2019 to 2020, respectively, where he is currently a Researcher. He has hosted and participated in more than ten projects, is involved in many standardization activities organized by ITU-T and ICNRG of IRTF, and has contributed to ITU-T Standards Y.3071 and Supplement 35. His research interests include smart grids, information-centric networking, the Internet of Things, blockchain, and information security. He has served as a TPC Member for more than ten international conferences, including ITU Kaleidoscope, the IEEE Vehicular Technology Conference (VTC), the IEEE Consumer Communications and Networking Conference (CCNC), and the IEEE Wireless Communications and Networking Conference (WCNC). He was the Chair of the IEEE/CIC ICC 2nd EBTSRA workshop, the General Co-Chair and the Publicity Co-Chair of the IEEE VTC2020-Spring EBTSRA workshop, the TPC Co-Chair of the SCML2020, the Local Chair of the MONAMI 2020, the Session Co-Chair of the CcS2020, and the

Session Chair of the ITU Kaleidoscope 2016. He has been a Lead Guest Editor of Sensors, Peer-to-Peer Networking and Applications, and Energies. He is an Editorial Board Member of the IEEE Open Journal of Vehicular Technology (OJVT).