Scientific Report

Sheikh Mohammad Idrees
India
Norwegian University of Science and Technology
Mariusz Nowostawski
01/11/2019 to 31/10/2021

I – SCIENTIFIC ACTIVITY DURING YOUR FELLOWSHIP

During the tenure of my fellowship, my research was centred around transformations through blockchain technology. The main objective was to investigate and study the contribution of blockchain technology in different industrial sectors. The study further focused on analysing and developing a comprehensive understanding about the various technical aspects and other cutting-edge research areas involving blockchain technology and decentralization. During the fellowship period at NTNU, I was involved in several scientific tasks. Initially it started with the study of analysing the trading/business with Cryptocurrencies and Foreign Exchange/Global fiat currencies. Further I explored to study the various security aspects of blockchain technology intended for industrial application and suggest possible solutions for enhancing the security in blockchain. I was further involved in studying how in recent years the adoption of blockchain technology by multiple industrial sectors has gained momentum along with the financial sector where it is touching new heights day by day. We also attempted to study the adaption of blockchain technology in the healthcare sector, where the focus was on privacy preserving infrastructure for healthcare systems. Furthermore, since 2019 the world has been badly hit by the COVID-19 pandemic. I also tried to study how the use of blockchain technology in contact tracing applications can help in containment of corona virus and also cope with the security concerns of related data. The list of my publications during the fellowship period indicates other scientific activities I have been involved with during my fellowship tenure.
II – PUBLICATION(S) DURING YOUR FELLOWSHIP

Publication List:

Books:


Journal Publications:


Book chapters:

III – ATTENDED SEMINARS, WORKHOPS, CONFERENCES


Invited Talk

- Delivered a talk on - “Applications of Deep Learning for COVID-19 Diagnosis and Treatment” at Jamia Hamdard, New Delhi India, 30 May 2020.

IV – RESEARCH EXCHANGE PROGRAMME (REP)

For the Research Exchange Program, I visited Blockchain Lab at FIT Fraunhofer, Sankt Augustin, Germany. I was hosted by Professor Thomas Rose for the REP. During the research visit I presented my research work at FIT and got the opportunity to know about the various projects the teams at FIT Fraunhofer is currently working upon. This REP helped me to share my research problems and experiences with the professors, and other researchers at the department and receive valuable inputs and feedbacks from them. The primary purpose of this visit was to find future research collaborations and funding opportunities. REP with FIT Fraunhofer proved to be very beneficial in terms of exchanging new research ideas and establishing collaboration for future work.