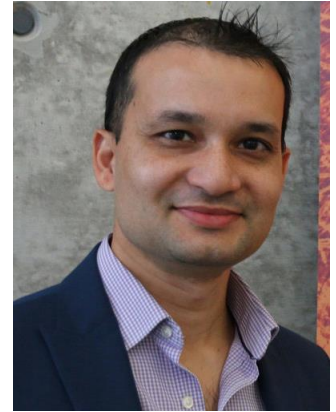


## Foreword about Rupak Kharel, University of Huddersfield, Huddersfield, UK.

**Professor Rupak Kharel** received his PhD in Secure Communication Systems and MSc from Northumbria University, UK in 2011 and 2007 respectively. Before this, he completed his Bachelors in Computer Engineering from Institute of Engineering (IoE), Pulchowk Campus, Tribhuvan University, Nepal in 2004. Since Sep 2023, he has been Associate Dean International and Professor of Cyber Security at the School of Computing and Engineering, University of Huddersfield, UK. Prior to this, he was a Professor of Cyber Security and Director of Cyber Solutions Centre at University of Central Lancashire, UK between Oct 2021 to Sep 2023, Reader in Cyber Security at the Department of Computing and Mathematics, Manchester Metropolitan University (MMU) between April 2019 - Oct 2021, and a Senior Lecturer at the School of Engineering, MMU between July 2011 - April 2019. Rupak has co-authored 100+ several journal articles, conference papers and book chapters primarily in the area of internet of things (IoT) challenges, cyber security, connected vehicles, smart systems and next-gen communication systems.



The next-generation wireless communication networks, including 5G and beyond 5G (B5G), are ushering in a new era for application technology, where everything is smartly connected with high speed and ultra-low latency. These technologies are not just an upgrade in data transmission speed but also form the basis for the development of a range of new applications, creating new opportunities in all areas of life. With the ability to simultaneously connect a large number of devices, the 5G/B5G networks lay the foundation for the Internet of Things (IoT) system, providing strong support for sectors such as remote healthcare, multimedia communication, intelligent transportation, smart cities, and more. Moreover, wireless communication networks combined with Artificial Intelligence (AI) and Machine Learning (ML) promise to bring about intelligent systems capable of automation, efficient energy management, and optimization at a high level. This integration also enhances security measures, safeguarding data against increasingly sophisticated cyber threats. Therefore, the advancements brought by 5G/B5G will reshape our society in profound ways, making our future more connected, intelligent, and efficient than ever before.

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