

Computer Society of India
Coimbatore Chapter



2020- 2021
CSI Monthly Meeting Report

May 2020

"Quantum Computing: An Introduction"

Key Note Speaker:

Dr. Natarajan Venkatachalam, Postdoctoral Research Fellow

Quantum Engineering Technology Labs, University of Bristol, UK

20th May, 2020

The webinar by CSI Coimbatore Chapter was held on 20th of May 2020, at 3pm with overwhelming registrations of more than 200. The speaker was Dr. Natarajan Venkatachalam, Postdoctoral Research Fellow, Quantum Engineering Technology Labs, University of Bristol, UK, and the topic was “Quantum Computing: An Introduction.”

The chairperson of CSI Coimbatore Chapter, Dr. G. Radhamani welcomed all the participants and introduced the Keynote Speaker. Dr Natarajan Venkatachalam briefed the basic concepts of Quantum computing and the application of this concept in various domains such as Data analytics, Internet of Things.

Quantum computing (QC) is the study on the computer technology development based on the principles of quantum theory. Quantum computers leverage quantum mechanical phenomena to handle information. Quantum computing uses quantum bits or qubits instead of the traditional binary bits ‘0’ or ‘1’. The quantum computer gets enormous processing power through the ability for bits to be in multiple states. The researchers throughout the globe apply quantum processors for applications in different fields. Many applications which involve computation of large data sets uses quantum computers. Quantum computing can be integrated with the applications deployed with the concepts like Internet of Things (IoT), Machine Learning and Data Analytics.

As the computational power of the Quantum computers is huge, they are suited for problems which have large dataset computations. This concept can be applied in various fields like Healthcare, Finance, Marketing and Logistics etc. The usage of the Qiskit (QC Simulator) has been discussed. The attendees raised the queries related to the usage of simulators for computing. The session was an eye opener to the researchers and the students. Mr. N. Duraiswamy, Secretary, CSI-Coimbatore Chapter proposed vote of thanks.

