



Faculty Development Program



VIT[®]
Vellore Institute of Technology
(Deemed to be University under section 3 of UGC Act, 1956)

Event Outcome

Title : DEMYSTIFYING QUANTUM COMPUTING

Date : 2025-08-18 - 2025-08-22

Time : 10:00 - 17:30

Venue : SJT620

- Understand various quantum computing principles and properties.
- Apply matrix algebra techniques for quantum algorithms.
- Design quantum gate and circuit operations.
- Distinguish classical and quantum information theory and analyse the techniques for quantum algorithms
- Apply and design quantum algorithms

	<p>Resource Person 1 - Details Name : Ragukumar P Designation : Assistant Professor Sr. Grade 2, School of Advanced Sciences University/ Company : VIT, Vellore Address : India, 632014.</p>
	<p>Resource Person 2 - Details Name : Sripathy B Designation : Assistant Professor Sr. Grade 1, School of Advanced Sciences University/ Company : VIT, Vellore Address : India, 632014.</p>
	<p>Resource Person 3 - Details Name : Vidhyadhiraja N S Designation : Professor, Theoretical Science Group University/ Company : Jawaharlal Nehru Centre for Advanced Scientific Research, Bangalore Address : India, 560064.</p>
	<p>Resource Person 4 - Details Name : SIBASISH GHOSH Designation : Professor, Theoretical Physics Group University/ Company : The Institute of Mathematical Sciences Chennai, Chennai Address : India, 600113.</p>
	<p>Resource Person 5 - Details Name : KARTHIGANESH DURAI Designation : FOUNDER AND CEO, KwantumG Research Labs Pvt Ltd University/ Company : KwantumG Research Labs Pvt Ltd, Bangalore Address : India, 560064.</p>
	<p>Resource Person 6 - Details Name : SHASHANK GUPTA Designation : Research Lead, QNU Labs University/ Company : QNU Labs, Bangalore Address : India, Bangalore.</p>

Resource Person's Profile :

1. Profile of Ragukumar P

Dr.P. Ragukumar is from Department of Mathematics, School of Advanced Sciences, VIT Vellore. His areas of research includes Graph Algorithms, Parameterized Algorithms and Approximation Algorithms.

2. Profile of Sripathy B

Dr.B. Sripathy is from Department of Mathematics, School of Advanced Sciences, VIT Vellore. His area of research includes Wavelet Analysis and Differential Equations.

3. Profile of Vidhyadhiraja N S

N.S. Vidhyadhiraja obtained his Ph.D. from the Indian Institute of Science, Bengaluru, in 2001. He then spent four years as a postdoctoral fellow at the University of Oxford, UK. In 2005, he joined the Jawaharlal Nehru Centre for Advanced Scientific Research (JNCASR), Bengaluru, where he currently serves as a Professor in the Theoretical Sciences Unit and Dean of the Fellowships and Extensions Office.

4. Profile of SIBASISH GHOSH

Prof. Sibasish Ghosh is an academic researcher from The Institute of Mathematical Sciences, Taramani, Chennai under Homi Bhabha National Institute. The author has contributed to research in topics: Quantum entanglement and Qubit. The author has an hindex of 19, co-authored 122 publications.

5. Profile of KARTHIGANESH DURAI

Karthiganesh Durai is the founder and CEO of KwantumG Research Labs Private Limited, Bengaluru. He is having more than 20 years experience in the field of Quantum Computing.

6. Profile of SHASHANK GUPTA

Dr.Shashank Gupta is a lead quantum based researcher working in QNU Labs, Bangalore.

At the end of this FDP, a participant or a faculty can have a good starting point to enter into quantum computing. Further, a participant can understand the basics of quantum computing and the relevant knowledge to pursue research in quantum computing.

Minimum requirement of Python coding is required. But, some relevant basics of python related to quantum computing may be covered for the participants

**Coordinator's: Prof. RAGUKUMAR P 17959 - Assistant Professor Sr. Grade 2 - SAS
Prof. SRIPATHY B 19543 - Assistant Professor Sr. Grade 1 - SAS**