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FACULTY COORDINATORS



Dr. B. Venkataramana



Dr. R.Sathya Narayana Sharma



Dr. Rachna Bhatia

Dr. Reenu Rani

Registration Details

Registration Fee: Rs. 500/- (Excluding GST) Payment & Registration Link : https://events.vit.ac.in/

Important Dates

Last date for registration: 25.05.2023 Programme dates: 26.05.2023 to 28.05.2023 Venue: T T Gallery II (V.O.C Gallery)

Contact Details Dr Venkataramana B Ph: 7549010564 Email: venkataramana.b@vit.ac.in

Note: Attendance is mandatory for all the sessions. Everyone should bring your own laptop.





Short Term Course on Data driven approach in **Biology and Healthcare** using SQL, R & Python programming

26 - 28 May 2023

ORGANISED BY :

DEPARTMENT OF MATHEMATICS SCHOOL OF ADVANCED SCIENCES **VELLORE INSTITUTE OF TECHNOLOGY,** VELLORE 632 014, INDIA

About the Institute

Vellore Institute of Technology was founded in 1984 in the name of "Vellore Engineering College" by the Chancellor Dr. G. Viswanathan. From it's humble beginning, the institution has grown exponentially to that of having more than 36,000 students. Students from all the states of India and from more than 60 countries are studying at VIT. University status was conferred in 2001 by MHRD, Govt. of India in recognition of its excellence in academics, research and extra curricular initiatives. Currently, VIT has 4 campuses-in Vellore, Chennai, Amravati (AP) and Bhopal (MP). The National Institutional Ranking Framework (NIRF) of the MHRD, Government of India, has ranked 10th in Research, 12th in th Engineering Category and 9th in University Category in 2022. VIT has gone for accreditation by NAAC [India], IET [UK], and ABET [USA] and follows world class academic processes. VIT is the first and only University in India to get 4-star rating from QS, the world universities ranking organization. VIT has also been ranked in the top 301-350 in Times Higher Education (THE) World University Ranking (Emerging Economies) in 2022 and in the top 173 in QS Asia Ranking.

About School of Advanced Sciences

School of Advanced Sciences (SAS), which was established in the year 1984, comprises Mathematics, Physics, and Chemistry departments. The vision of the School is to provide quality teaching and research, which would make an impact at a global level. The School consists of a total of 277 experienced and energetic faculty, which includes 133 in Mathematics, 66 in Physics, and 78in Chemistry. The research activities, publications and fruitful interactions with the industry are a testimonial to the expertise of the faculty in VIT. The School offers Masters Programs in Data Science, Business Statistics, Physics and Chemistry; Integrated Masters Programs in Mathematics, Chemistry, Physics and Computational Statistics & Data Analytics. The School offers Ph.D. programs in frontier research areas in all THREE disciplines. The candidates selected through a National level test and a comprehensive interview, undertake extensive course work and the School has on roll 961 Ph.D. Scholars.



About the Programme

A biological system, such as a human cell, exhibits molecular and physical events of complex interplay. In order to understand interdependencies of various components and events of such a complex system, a biomedical or biological experiment usually gathers data on a smaller and/or simpler component. In order to be valuable, the data produced by an organisation must be organised and structured in a way that can be analysed to draw conclusions. In this Programme, you'll learn the importance of collecting, organising and manipulating large amounts of data using databases and other technologies.

Topics to be covered during the programme :

Day -1 : The Relational Model, Querying relational data, Logical database design: E-R to relational. SQL: Basics of SQL, DDL, DML, DCL, structure – creation, alteration, defining, constraints – Primary key, foreign key, unique, not null, check, IN operators.

Day-2: Breast Cancer Survival Analysis, Variable Selection for Tuberculosis Data, m Wastewater-based Epidemiology as an Early Warning System for SARS-CoV-2: Mathematical Modeling Approaches, Epidemiological Models and Quality Control Charts with R.

Day -3: Data science: The journey from Data to Business, : Live Covid Analysis using Python, : Machine Learning Demystifying and Unlocking Your potential: Esse ntial soft Skill for



Resource Persons

The sessions of the programme will be handled by eminent personalities in the respective domain and names follows:



Dr. C. Ponnuraja Scientist E & Head, Department of Statistics National Institute for Research in Tuberculosis, ICMR, Chennai



Dr. Sanjay Lamba Scientist, Tata Institute for Genetics and Society (TIGS), Bangalore



Dr. P. Manikandan Assistant Professor Department of Data Science,

Loyola College, Chennai



Prof. G. EZHIL KRISHNAN Co-Founder & Director, Remcos Medical Technologies Pvt. Ltd. IITM Incubation Cell, Research Park, Chennai.



Mr. Arpit Yadav Senior Data scientist Researcher in AIML, Turingminds.ai, Bangalore



Dr Meha Rathod, Scientist, AMTZ, AIML Healthcare Consultant, Soft skills Expert