

ABOUT THE STTP

Genomic Data Science is the field that applies statistics and data science to the genome. We'll also examine a different biological question, and ask which DNA patterns play the role of molecular clocks.

This workshop would be extremely beneficial to Research Scholars and to Medical Professionals in enhancing knowledge in the field of Bioinformatics. All the titles will be taught practically based on Clinical Literature. Most of the software handled in the session will be based on Bigdata application tools (Bioconductor, Python, R, Perl, Java).

Bioinformatic techniques are helpful in target identification of generally proteins or enzymes, target validation, understanding the protein, evolution and phylogeny and protein modelling. Bioinformatic analysis can quicken the process of identifying a drug target and to screen and refine drug candidates.

This short term training covers the concepts and tools to understand, analyze, and interpret data from next generation sequencing experiments. It teaches the most common tools used in genomic data science including how to use the comma-and line, along with a variety of software implementation tools like Python, R, Bioconductor, and Galaxy.

PARTICIPANTS

A maximum of 100 registrations are permissible on the basis of first come first serve basis and selected candidates will be intimated through e-mail.

NO REGISTRATION FEE

Patrons

Dr.T.R.Paarivendhar, Chancellor
Mr.Ravi Pachamoothoo, Pro Chancellor

Admin

Dr.P.Sathyanarayanan, Pro Chancellor
Academic
Dr.R.Shivakumar, Vice President

Advisory Committee

Dr.Sandeep Sancheti, Vice Chancellor
Dr.D.Antony Ashok Kumar, Deputy Registrar, SRM IST
Mr. Wordsworth Manivannan, Deputy Registrar E&T
Dr.C.Muthamizhchelvan, Pro-VC(E&T)
Dr.T.V.Gopal, Dean, CET
Dr.RevathiVenkataraman, Chair Person, School of Computing

Program Chair

Dr.C.Lakshmi, Professor&Head
Department of Software Engineering, SRM IST
Department of Artificial Intelligence, SRMIST

Convenor(s)

Dr. M.S. Abirami, Asst. Professor / SWE
Dr. S. Karthik, Asst. Professor / SWE

Coordinators

Mr. S. Ramraj, Asst. Professor / SWE
Dr. M. Uma, Asst. Professor / SWE
Dr. R. Renuka Devi, Asst. Professor / SWE

Organizing Committee

Dr. S. Krishnaveni Asst. Professor / SWE
Mrs. J. Jeyasudha Asst. Professor / SWE
Mrs. B. Jothi Asst. Professor / SWE
Mr. D.Vivek Asst. Professor / SWE
Mrs. S. Anuja Asst.Professor / SWE



SRM
INSTITUTE OF SCIENCE & TECHNOLOGY
(Deemed to be University u/s 3 of UGC Act, 1956)

Online Short Term Training Programme on

BIG DATA ANALYTICS IN GENETICS

22nd to 27th February 2021



ORGANIZED BY

**DEPARTMENT OF
SOFTWARE ENGINEERING**



ABOUT THE SRM INSTITUTE OF SCIENCE AND TECHNOLOGY

(Formerly Known as SRM University)

SRM Institute of Science & Technology is one of the top-ranking universities in India with over 52,000 students and more than 3,200 faculty across all the campus, offering a wide range of undergraduate, postgraduate and doctoral programs in Engineering, Management, Medicine & Health sciences, Science & Humanities, Pharmacy, Law and Agriculture.

ABOUT THE DEPARTMENT

The prime focus of the Software Engineering department is enhancing the students extend and strengthen the ability to develop and sustain the transformative system of tomorrow. The activities of the department are determined to create future leaders and trendsetters for the next generation. Our department offers a comprehensive undergraduate course curriculum that prepares students to be leaders in software engineering. Department of Software Engineering started offering UG courses from 2008 onwards. Well qualified and experienced faculties form a backbone of the department. Resource person from various industries is invited to deliver guest lectures and seminars on related topics in the curriculum. The department of software engineering provides R&D to both faculties and students in the research domain such as Computer Vision, Software Process & Engineering, Network System & Services and Computing Technologies.

COMPUTING TECHNOLOGIES GROUP

The Intention of computing technologies domain is to do scientific research to make computer systems behave intelligently thereby applying the computations in various domains such as Multimedia Data analytics, Text Mining, Text Analytics, Big Data Analytics, Geographical Data Analysis, Brain and Human Computing Interface, Computational Biology, Health care, etc. to predict the pattern from it. The main objective is to learn and implement new ideas through latest technologies across domains with tools. Ongoing research in our domain: CHAT BOT For Website Using Machine Learning, Depression Analysis on Social Media Networks, Health Care Automation Using Big data Analytics, Cyclone Track Analysis Using Data Mining Techniques, Academic Student Performance Analysis and Medical Data Analysis using ML and DL.

SCOPE OF THE WORKSHOP:

- The workshop would be extremely beneficial to Research Scholars and to Medical Professionals in enhancing knowledge in the field of Bioinformatics.
- All the titles will be taught practically based on Clinical Literature.
- Most of the software handled in the session will be based on Bigdata application tools (Bioconductor, Python, R, Perl, Java)

RESOURCE PERSONS:

Dr. Balaji Munivelan Ph.D.,
Senior Bioinformatician & CEO
ABS Geno-informatics
Contact: +91 9444345906
Mail: bioinfobalaji@gmail.com
Mr. Prasana BalaKrishnan
Senior Technical Lead
HCL Technologies
Contact: +91 9150995906
FOR REGISTRATION:
<https://tinyurl.com/y84golfw>



SESSION DETAIL

Day	Forenoon (10 am to 12 pm)	Afternoon (1 pm to 3 pm)
Day 1 (22/02/2021)	Inauguration & keynote	Introduction to Python
Day 2 (23/02/2021)	Handling Big Data using PySpark	Genome-based Gene Retrieval Techniques
Day 3 (24/02/2021)	Introduction to R	Proteome-based Gene Retrieval Techniques
Day 4 (25/02/2021)	Data Science using R	<i>Insilico</i> Protein Profiling Studies
Day 5 (26/02/2021)	Protein 3D structure Prediction and Visualization	Microbial Informatics - <i>Insilico</i> techniques Part-1
Day 6 (27/02/2021)	Microbial Informatics - <i>Insilico</i> techniques Part-2	Microbial Informatics - <i>Insilico</i> techniques Part-3 & Valedictory

ADDRESS FOR CORRESPONDENCE

Mr. S. Ramraj
Assistant Professor
Department of Software Engineering
SRM Institute of Science & Technology
Potheri, SRM Nagar,
Kattankulathur, Tamil Nadu 603203
ramrajs@srmist.edu.in
9840859557

Dr. R. Renuka Devi
Assistant Professor
Department of Software Engineering
SRM Institute of Science & Technology
Potheri, SRM Nagar,
Kattankulathur, Tamil Nadu 603203
renukadr@srmist.edu.in
9952399936