













SHORT TERM TRAINING PROGRAM ON MERN STACK DEVELOPMENT [HYBRID MODE]

August 8 - 13, 2022

# Organised by

Advanced Multilingual Computing Research Group
Department of Computing Technologies
School of Computing
College of Engineering and Technology
SRM Institute of Science and Technology
SRM Nagar, Kattankulathur - 603 203
Chengalpattu Dist.(TN)

# **PATRONS**

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Dr. Revathy Venkatraman
Professor & Chair Person
School of Computing, SRMIST, KTR.
DR. Dr. A.Rathinam, Director, Alumni Affairs, SRMIST

## CONVENOR

Dr.S.Poornima, Assistant Professor, C.Tech

## CO-ORDINATOR

Mrs. J. Jayapradha, Assistant Professor, C.Tech

#### **ORGANIZING COMMITTEE**

Dr.M.Uma Devi, Associate Professor, C.Tech Mrs.B. Sowmiya, Assistant Professor, C.Tech Mrs.B. Ida Seraphim, Assistant Professor, C.Tech Mr.G.Manoj Kumar, Assistant Professor, C.Tech

#### **REGISTRATION FEES**

Students/Research scholars: INR 300
Academicians/Industry Persons: INR 400

# **Account Details for Payment**

Account number: 459777790

Account Name: Computer Science Eng&Asso Branch: Srm university IESC code: IDIB000S181

#### REGISTRATION LINK FOR PARTICIPANTS

https://forms.gle/HjXiMdtQiS2SkKg4A

Last date of Registration: July 31, 2022 Session timing: 9.30 AM to 3.30 PM with breakout sessions

## **INSTRUCTIONS FOR PARTICIPANTS**

- Registration is compulsory for all participants.
- · Certificate will be provided.
- Participants will be trained to do a project in Mern stack development.
- SRM participants need to attend the event offline and outside participants online.
- Session link will be sent through email to participants, SRM participants bring your laptop.
- Attendance is mandatory for all the days.

#### **TARGET AUDIENCE**

- Academicians/Industry Persons
- Research scholars/ UG-PG students
- Practicing Engineers

# FOR QUERIES CONTACT

mernstacksrmcse@gmail.com 9790749571

Gift voucher of worth Rs.1000 for the best project

## **ABOUT SRMIST**

Sri Ramasamy Memorial Engineering College (SRMEC) was started in the academic year 1985-86 at Kattankulathur. Kancheepuram District, Tamil Nadu, India, After being accorded the deemed to be university status in the year 2002, SRM Institute of Science and Technology(formerly known as SRM University) has made rapid strides in the field of education and has now become a multi stream university with six Faculties - Engineering & Technology, Science & Humanities, Medicine & Health Sciences, Management, Law and Agricultural Sciences. SRMIST is one of the top ranking institutions in India functioning in four campuses located at Kattankulathur, Vadapalani and Ramapuram in Tamil Nadu besides a fourth campus at Modi Nagar, Ghaziabad, with over 50,000 students and 3000 faculty, offering a wide range of Undergraduate, Postgraduate and Doctoral programs. Recently SRM IST has been accredited with the highest grade of A++ (A double plus) by NAAC. World renowned ranking agency QS has rated SRMIST as a '4 Star' institute with '5 Star' ratings in Teaching, Employability and Inclusiveness. MHRD has placed SRMIST under Category A. In addition to institutional accreditation, Five undergraduate engineering programs of Kattankulathur campus have been accredited by different commissions of ABET(USA) (www.abet.org) and four other programs by IET (UK). This institution hosted the 98th Indian Science Congress in 2011 where distinguished delegates including six Nobel Laureates and other celebrated scientists, academicians and philosophers participated and delivered their thoughts. The launching of SRMSAT satellite in collaboration with ISRO was another milestone. SRMIST was ranked.

#### **DEPARTMENT OF COMPUTING TECHNOLOGIES**

The future of Computing rests here. The department's mission is to advance, evolve and enhance Computer Science and Engineering fundamentals to build the intellectual capital of the society. The CSE Department Endeavour's to be an important regional, national, and international resource centre for the development of Computing and its applications. The department is witnessing a period of exciting growth and opportunity propelled by the growth of technology and its recognition through excellence. CSE boasts a vibrant student body of about 5000 undergraduate and 50 postgraduate students and a stellar faculty of professors and lecturers. The department provides extensive computing resources for research and education. Apart from academics, enormous scope is given to the students through estimable in house projects.. The department also opens the doorstep of education for Virtual Reality (VR) and Augmented Reality (AR). Reputed Adjunct professors are hired to give hyper-immersive experience to students in the VR and AR field that will cater to an experiential learning environment through a purely digital ecosystem.

## **ABOUT THE STTP**

MERN Stack is the most robust option for the development of high-quality web applications. The stack uses high-performance and bespoke technologies that enables the development of web applications. The whole system of the MERN stack includes front end, back-end and REST API.

The key objectives of this STTP are.

- Designing a reactive and responsive web page.
- Creating a web server using NodeJS and MongoDB along with securing the server.
- Learning about react hooks and development of react project.
- Deployment of a website.

# **TECHNICAL EXPERT**

Abhiraj Singh Kulaar, Full Stack Developer, NewZip.



Date	Topics
08/08/2022	Introduction to Software architecture, designing a resolution responsive web page using HTML and styling using CSS
09/08/2022	Programmatically modify DOM using JS and fetch data from external servers to create a user reactive website
10/08/2022	Create a web server using NodeJS express and MongoDB which will serve HTTP requests
11/08/2022	Secure a webpage and server using HTTPS, secure cookies and authentication using JWT token and local storage
12/08/2022	Creating react components which are reusable and developing a react project by learning react hooks
13/08/2022	Deploy a website on AWS, using cloudfront to optimize content delivery and use caching to optimize server response times. Project implementation Project evaluation