

A Reflection Report

5 Day STTP

on

Cloud Computing Strategies and Virtualization Techniques

Organized by

**Department of Computer Science
and Engineering**

07-June-2021 to 11- June-2021

Coordinators

Dr.R.Anitha, Prof. & Head

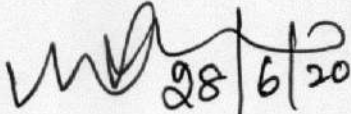
Ms.S.Poorani, AP/CSE

Ms.S.U.Muthunagai, AP/CSE

Ms.R.Iyswarya, AP/CSE

Ms.Rupa Kesavan, AP/CSE

Noted :


28/6/2021



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DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

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for the

Inaugural Function of

5 Day STTP

on

"Cloud Computing Strategies and Virtualization Techniques"

by

Dr. A. Arivoli

Assistant Professor(Sr.)

School of Computer Science and Engineering

Vellore Institute of Technology-Vellore

Meet ID : meet.google.com/dxd-gmns-skp

Date : 7th June 2021 – 11th June 2021

Time : 4.00 PM to 5.30 PM

Organizers:

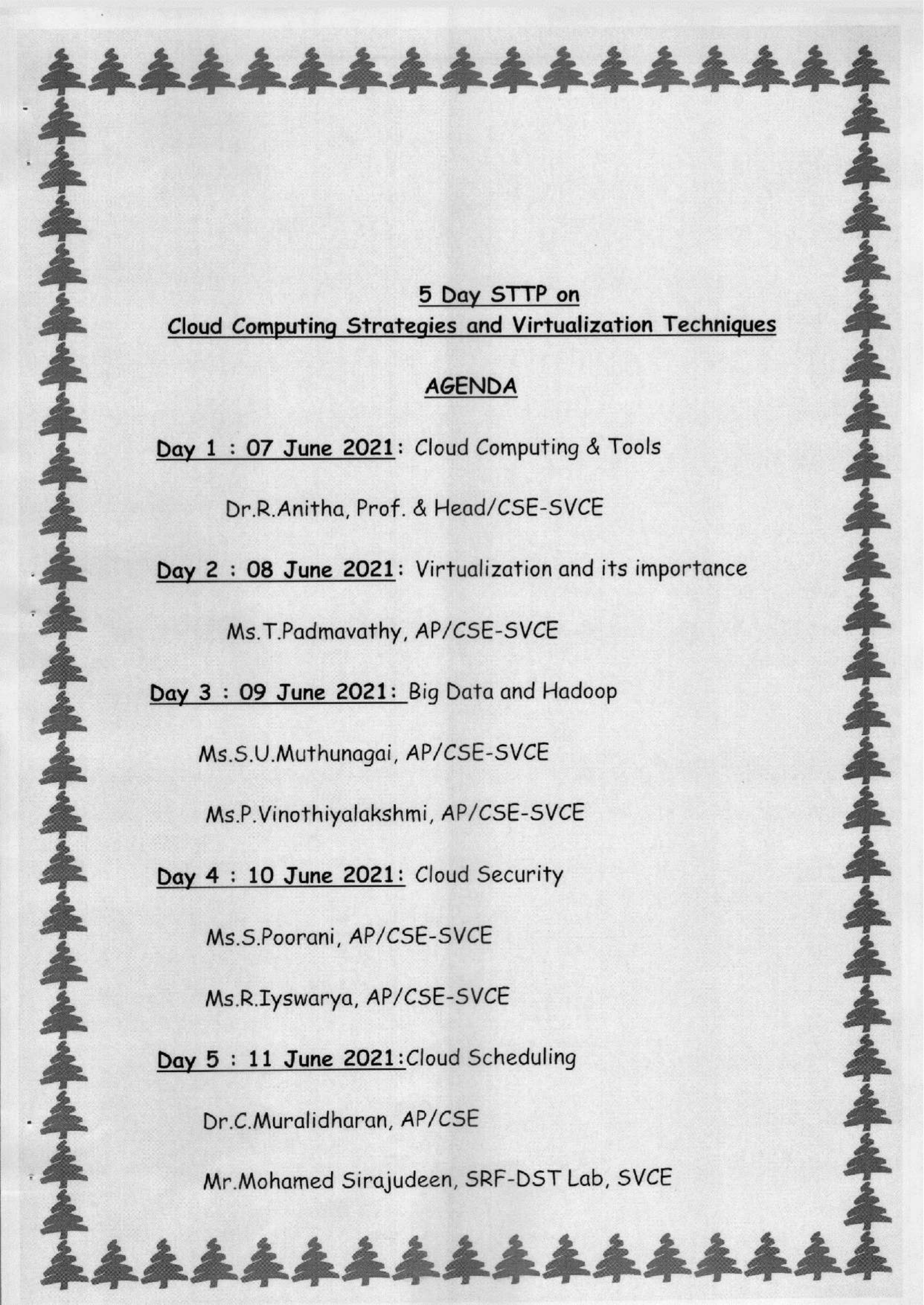
Dr.R.Anitha, Prof. & Head

Ms.S.Poorani, AP/CSE

Ms.S.U.Muthunagai, AP/CSE

Ms.R.Iyswarya, AP/CSE

Ms.Rupa Kesavan, AP/CSE



5 Day STTP on
Cloud Computing Strategies and Virtualization Techniques

AGENDA

Day 1 : 07 June 2021: Cloud Computing & Tools

Dr.R.Anitha, Prof. & Head/CSE-SVCE

Day 2 : 08 June 2021: Virtualization and its importance

Ms.T.Padmavathy, AP/CSE-SVCE

Day 3 : 09 June 2021: Big Data and Hadoop

Ms.S.U.Muthunagai, AP/CSE-SVCE

Ms.P.Vinothiyalakshmi, AP/CSE-SVCE

Day 4 : 10 June 2021: Cloud Security

Ms.S.Poorani, AP/CSE-SVCE

Ms.R.Iyswarya, AP/CSE-SVCE

Day 5 : 11 June 2021: Cloud Scheduling

Dr.C.Muralidharan, AP/CSE

Mr.Mohamed Sirajudeen, SRF-DST Lab, SVCE

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Invitation

Agenda

Reflection report on Cloud computing

Certificate Template

Registered Participants

Mail Conversation for seeking participants

Day 1 (07/6/2021) - Cloud Computing & Tools

The Department of Computer Science and Engineering, Sri Venkateswara College of Engineering conducted a 5 day STTP on “Cloud Computing and Virtualization Techniques”. The session inaugurated by Dr. A. Arivoli Assistant Professor(Sr.) School of Computer Science and Engineering ,Vellore Institute of Technology-Vellore.The guest speaker was Dr.Anitha. R HoD/CSE, Ms. Padmavathy T Asst.Prof/CSE, Ms.Vinothyalakshmi Asst.Prof/CSE,Ms. Poorani S Asst.Prof/CSE, Ms. Muthunagai Asst.Prof/CSE, Ms.Iyswarya Asst.Prof/CSE, Mr. Mohammed Sirajudeen SRF-DST Lab/CSE/SVCE, Dr. Muralidharan C Asst.Prof/CSE/Bannari Amman Institute of Technology.

The speaker, Dr. A. Arivoli Assistant Professor(Sr.) School of Computer Science and Engineering ,Vellore Institute of Technology-Vellore, gave the importance of data and applications storage and management in the cloud and how every organization is using its cloud resources wisely.She also gave a key note on modern cloud computing strategies leveraging more than public clouds.

She also explains how hybrid cloud architecture combines a public cloud with a business’s private cloud or colocated servers. Also how it offers the scalable power and flexibility with the security and control of a private network.

Day 2 (08/06/2021) - Virtualization and its importance

Day 2 started with Ms.T.Padmavathy,Assistant Professor,SVCE on Cloud Virtualization Techniques. The Session started with the basics of Cloud and Virtualization concepts. She also explained the important role of virtualization in cloud.

Virtualization is a technique, which allows to share a single physical instance of a resource or an application among multiple customers and organizations. It does by assigning a logical name to a physical storage and providing a pointer to that physical resource when demanded.

The speaker explained with an example between a classical computer without virtualization and computer with virtualization. She gave brief discussion about the types of virtualization. She also analyzed how virtualization can be achieved in a system.The speaker also gave an instance on how a user can take a computer running on Windows as an operating system, then make a virtual machine over that computer, and then run another operating system on virtual machines like Linux.

Also she explains how Virtualization introduces the new significant connection between hardware-software and is one of the foundational portions of cloud computing technology in order to help and utilize the capabilities of cloud computing to its entirety.

The speaker ended the session how to achieve virtualization using the software. she demonstrated virtualization concept using VMWARE Software.

Day 3 (09/06/2021) - BigData and Hadoop

Day 3 was started with Ms. S. U. Muthunagai Assistant Professor, Department of Computer Science and Engineering, SVCE on Big Data. The session initiated with Introduction of Big Data and characteristics of Big Data. In addition to the importance of Big Data, the speaker also explains the sources of Big Data with various applications. After exploring the knowledge about Big Data Technologies especially in operational Big Data, the speaker transformed to deliver her content through MongoDB. she states that MongoDB is a document-oriented database that stores data in JSON, CSV documents with dynamic schema and it is actually meant for NoSQL (Not Only SQL).

The speaker gave short key note on MongoDB as well as started the Hands-On session with MongoDB. With the Installation of MongoDB compass as window service the speaker leads the session in practical way. During the session, the speaker demonstrates the CRUD (Create, query, Update and Delete) operations with query for CSV files in MongoDB. The unique id created for each document inserted in the collection, has also been annotated very clearly. Finally the speaker concludes the session with practical demonstration of handling the huge documented CSV and JSON files in MongoDB GUI.

Followed by the Operational Big Data, the session is handed over to Ms. P. Vinothyalakshmi to handle Analytical Big Data with Hadoop.

She started the session with importance of Hadoop and key benefits of using Hadoop even many technologies like Apache Spark, BigQuery, etc., exist for Big Data Analytics. She delivers the lecture on Hadoop with installation steps and performed various operation in the same.

Day 4 (10/06/2021) - Cloud Security

Day 4 started with Ms.R.Iyswarya Assistant Professor, Department of Computer Science and Engineering, SVCE on data security. The session started with the basics of Data security functions like how to prevent data breaches and reduce risk of data exposure for regulatory compliance purposes.

Also speaker elaborated on how organization plays a data security's role by ensuring the safe and secure use of private data with minimizing exposure risk. Followed by speaker gave a reason for the team effort that should be tackled from all angles. By understanding what data security is — and the measures you can take to improve it — you'll minimize the risk of breaches, hacks, or unintended data loss.

Followed by the security on data, the session is handed over to Ms.S.Poorani Assistant Professor, Department of Computer Science and Engineering, SVCE on Secure cloud. The session started with the Considerations of Cloud Computing Security and how cloud security applies to security for cloud environments - software as a service (SaaS) delivery model of security services, which are hosted in the cloud rather than deployed via on-premise hardware or software.

The speaker gave brief discussion on Cloud security challenges may come in different ways and giving solutions for several vulnerabilities. At the end of the session, She demonstrated how the encryption and decryption process carried out with cryptographic tools.

Day 5 (11/06/2021) - Cloud Scheduling

Day 5 started with Mr. Mohammed Sirajudeen SRF-DST Lab-CSE,SVCE on cloud scheduling. The speaker explained about the Cloud Scheduler and the importance of scheduling mechanism, also give the basics of fully managed enterprise-grade job scheduler like how it allows you to schedule virtually any job, including batch, big data jobs, cloud infrastructure operations, and more.

The speaker also explains about the importance of scheduling in cloud with task scheduling - essential and most important part in a cloud computing environment to improve the efficient utilization of resource and yields less response time so that the execution of submitted tasks takes place within a possible minimum time.

Followed by the scheduling concept, speaker handed over the session to Dr.C.Muralidharan AP/CSE-Bannari Amman Institute of Technology,Coimbatore.The speaker gave a short note on Cloud Build - a service that executes your builds on Google Cloud Platform's infrastructure also how to import source code from a variety of repositories or cloud storage spaces, execute a build to your specifications, and produce artifacts such as Docker containers or Java archives.

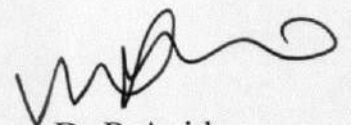
The speaker gave information about the billing requirement, the overall cost to be manageable, as each Cloud Scheduler job costs \$0.10 (USD) per month, and there is an allowance of three free jobs per Google account. Use the Blaze pricing calculator to generate a cost estimate based on your projected usage

The speaker also give demonstration on how jobs are scheduled with scheduling algorithms and how to trigger a cloud function to run the job.

Thus the Five day - Short Term Training Program on Cloud Computing and Virtualization Techniques ended with receiving overall feedback from the participants, and Question and Answers session, followed by thanks note given by Ms.RupaKesavan Asst.Prof/CSE about the 5-days short term training programme conducted successfully, Valedictory conducted in the presence of HOD/CSE. Everyone including student participants, all department faculty participants are thanked for being supportive in conducting the STTP.

HOD/CSE also thanked all the speakers of every day for the effective delivery of valuable inputs shared, also felt heartfelt thanks to every participants and ensured with the extension of conducting similar effective training programmes/ workshops/hands-on boot camp sessions awarded to the students on the emerging areas to expand their knowledge.

The session ended with ensuring all the participants with eligible attendance are provided the certificate of participation and the same is granted with the approval of STTP convener, The Principal and Head of the Department.



Dr.R.Anitha

HoD/CS

The Certificate of Participation

This is to certify that Dr. /Mr. /Ms. {{full name}} of {{other identifier}} has participated in the **Five Day Online**

STTP on Cloud Computing Strategies and Virtualization Techniques organized by the Department of **Computer Science and Engineering**, Sri Venkateswara College of Engineering from **7th June 2021 to 11th June 2021**.

S. Poorani

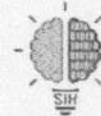
Ms. S.Poorani
AP / CSE - Organizer



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Accreditations

6-1-2021 21:50:58	2020cs0502@svce.ac	M.MEENAKSHI	7904979502	STUDENT	I Year	Sri Venkateswara College	CSE
6-1-2021 21:52:37	Nayanikamurugan@gr	NAYANIKA. M	9445201063	STUDENT	I Year	Sri venkateshwara college	Cse
6-1-2021 21:54:01	2020cs0765@svce.ac	MOHAMED NOOH H M	9629249660	STUDENT	I Year	Sri venkateshwara college	Computer science and engineering
6-1-2021 21:56:30	2020cs0432@svce.ac	PREETHA V	7904297589	STUDENT	I Year	Sri venkateswara college	CSE
6-1-2021 22:22:18	2020cs0015@svce.ac	NAARAAYAN L.R	6382533291	STUDENT	I Year	Sri Venkateswara College	Cse
6-1-2021 23:00:54	2020ad0615@svce.ac	IYYAPPAN R	9551923113	STUDENT	I Year	SRI VENKATESHWARA	CCSE
6-2-2021 8:19:33	2020AD0547@SVCE.	PRIYANKA.A	+9177085918	STUDENT	I Year	Sri Venkateswara College	Artificial Intelligence and Data Sci
6-2-2021 8:28:40	khanaghavalle@gmail	KHANAGHAVALLE G R	0887068804	FACULTY	NA	SRI VENKATESWARA CC	COMPUTER SCIENCE AND ENG
6-2-2021 9:03:52	2020cs0515@svce.ac	MANDHAPATI VAISHNAV	8341678898	STUDENT	I Year	Sri venkataswara clg	Cse
6-2-2021 9:05:29	2020cs0542@svce.ac	MUHAMMED ARSHAD PA	9894935940	STUDENT	I Year	Sri venkateswara college	Computer Science and Engineering
6-2-2021 9:16:56	2020CS0426@SVCE.	JASWANT S	6385131398	STUDENT	I Year	Sri Venkateswara College	CSE
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6-2-2021 19:45:40	2020cs0017@svce.ac	K SARAVANAN	9003731575	STUDENT	I Year	SRI VENKATESWARA CC	CSE
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6-3-2021 9:20:52	2020cs0515@svce.ac	SHERLIN SHIBI S	6381357593	STUDENT	I Year	Sri venketeswara college	Computer science
6-3-2021 9:36:09	2020cs0028@svce.ac	HEMANTH KUMAR B	7550003628	STUDENT	I Year	Sri Venkateswara College	Cse
6-3-2021 9:36:15	2020cs0488@svce.ac	HARININIHARIKA	8220069071	STUDENT	I Year	Sri Venkateswara College	Cse
6-3-2021 10:55:43	2020cs0589@svce.ac	R Shakthi	9940923599	STUDENT	I Year	Sri Venkateswara College	CSE (Computer Science Enginee
6-3-2021 17:16:17	sriramamesh2002@gr	SRIMATHI RAMESH	8489885889	STUDENT	I Year	SRI VENKATESWARA CC	COMPUTER SCIENCE ENGINEE
6-4-2021 18:40:49	2020cs0005@svce.ac	LAKSHMIPRIYA R	9344749849	STUDENT	I Year	Sri Venkateswara College	Cse
6-5-2021 22:02:57	2020cs0146@svce.ac	SANGEETHA S K	8248130166	STUDENT	I Year	Sri Venkateswara College	CSE
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6-6-2021 8:44:32	kkumanan@svce.ac.ir	KUMANAN K	9176373069	FACULTY	NA	SVCE	CSE
6-6-2021 8:53:33	2020cs0233@svce.ac	SHAKTHI VIGNESH J	9941949400	STUDENT	I Year	SRI VENKATESWARA CC	CSE
6-6-2021 9:57:14	tharunlingali@gmail.co	Tharun H	8939892437	STUDENT	III Year	Sri Venkateshwara College	EEE

6-6-2021 10:29:36	shashwanth1211@gm	S.SHASHWANTH	9025719740	STUDENT	II Year	Svce	Cse
6-6-2021 10:43:36	sanjaykarthick09@gm	SANJAY KARTHICK M	8220485860	STUDENT	I Year	Sri Venkateswara College	CSE
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6-6-2021 18:44:45	2020cs0509@svce.ac	DEEPIKA.G	9003024780	STUDENT	I Year	SVCE	CSE
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6-7-2021 8:08:41	2020ad0194@svce.ac	DEEPIKA M	9686437389	STUDENT	I Year	SVCE	AI&DS
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6-7-2021 11:24:49	2020CS0427@svce.ac	ADITYAVIGNESH.V	8925267183	STUDENT	I Year	Sri Venkateswara College	BE.cse
6-7-2021 11:26:59	2020cs0446@svce.ac	AKSHAYA M	9444881655	STUDENT	I Year	Sri Venkateswara College	Computer science
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6-7-2021 15:29:29	mohamedafsarm@gm	MOHAMED AFSAR M	6381084235	STUDENT	II Year	Sri Venkateswara College	ECE
6-8-2021 8:28:46	tarunvvs29@gmail.cor	TARUN VVS	9080372115	STUDENT	II Year	Sri venkateswara college c	CSE
6-8-2021 9:38:48	2020cs0495@svce.ac	SUJITHA KUMAR N	9444506045	STUDENT	I Year	Sri venkateswara college c	Computer science engineering
6-9-2021 21:00:10	gopinathan1166@gma	GOPINATHAN K	8825631524	STUDENT	I Year	Sri Venkateswara College	AI&DS



POORANI S CSE <spoorani@svce.ac.in>

STTP on Cloud Computing:Reg

2 messages

POORANI S CSE <spoorani@svce.ac.in>

Tue, Jun 1, 2021 at 4:39 PM

To: HOD CS <hodcs@svce.ac.in>

Cc: MUTHUNAGAI S U CSE <muthunagai@svce.ac.in>, lyswarya R <iyswarya@svce.ac.in>, RUPA KESAVAN CSE <rupakesavan@svce.ac.in>

Dear Mam,
Please forward this mail to our faculty.

Hereby we request first FA's also to encourage their counseling student's to enroll in this event.

Dear Sir/Madam,

Greetings from the Department of Computer Science and Engineering, Sri Venkateswara College of Engineering-Sriperumbudur-Chennai.

On behalf of the Organizing Committee, We are delighted to inform you that the **Five days Online STTP on "Cloud Computing Strategies and Virtualization Techniques"**, Organizing by the Department of Computer Science and Engineering, Sri Venkateswara College of Engineering from **07th June to 11th June 2021** in Virtual mode. Expecting your participation and co-operation at the most.

Title: Cloud Computing Strategies and Virtualization Techniques

Key Take Away: Cloud-based services- Innovative Techniques-Industrial Strategies in recent trends.

Dates: 07 June to 11 June 2021.

Duration: 5 days

Modality of Programme: Online

Registration Link: <https://forms.gle/xvru4ciP4F53gsxL7>

We hereby seek the active participation of first-year Students for this short-term course.

Event organizers,
Dr.R.Anitha Prof & Head
Ms.S.Poorani AP/CSE
Ms.S.U.Muthunagai AP/CSE
Ms.R.lyswarya AP/CSE
Ms.Rupa Kesavan AP/CSE

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Thanks & Regards,
S.Poorani
Assistant Professor
Department of Computer Science & Engineering
Sri Venkateswara College of Engineering
Sriperumbudur,Chennai.

HoD-CSE <hodcs@svce.ac.in>

Tue, Jun 1, 2021 at 4:42 PM

To: cs <cs@svce.ac.in>

With Regards

Dr. R. Anitha,
Professor & Head,
Dept. of Computer Science & Engineering
Sri Venkateswara College of Engineering
Pennalur, Sriperumbudur - 602117.
9952337212
hodcs@svce.ac.in

Snapshots

2021-06-11_Five day STTP on Cloud Computing Strategies and Virtualization Techniques (2021-06-11 at 03:34...

Meeting details

Meeting details (52)

IN CALL

- Mohamed Siraj... (You)
- Mohamed Binuldeen
Your presentation
- 1091 Meenakshi M CS
- 1118 Rajeevar1.S - CS
- 1118 SAI PRITHVIR S...
- 1120 SANGEETHA S...
- 1121 Sanjana R CS

Activate Windows
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2021-06-09_Five day STTP on Cloud Computing Strategies and Virtualization Techniques (2021-06-09 at 03:34...

5 day STTP on "Cloud Computing Strategies and Virtualization Techniques"

Running a Job in Hadoop

FIGURE 6.12
Data flow in running a MapReduce job

Hadoop library

Activate Windows
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