

**SRI VENKATESWARA COLLEGE OF ENGINEERING  
(AUTONOMOUS – AFFILIATED TO ANNA UNIVERSITY)**

**DEPARTMENT OF INFORMATION TECHNOLOGY**

**ASSOCIATION OF INFORMATION TECHNOLOGISTS**

**Inaugural Function of AIT 2020-2021**

**&**

**Special Talk**

**A REPORT**

Submitted to the Principal



*[Handwritten Signature]*  
19/10/20

To: HOD-INT  
*[Handwritten Signature]*  
20/10



**SRI VENKATESWARA COLLEGE OF ENGINEERING  
(AUTONOMOUS – AFFILIATED TO ANNA UNIVERSITY)  
DEPARTMENT OF INFORMATION TECHNOLOGY**

**Report**

**Inaugural & Guest Lecture:**

Chief Guest : Mr. Shanthababu Pandian, Project Manager

Target Audience: III Year A and B section

Venue : Google Meet (Online platform)

Date & Time : 30.09.2020, 11:00 AM

**Objective:**

- To get an exposure about current trend technologies such as Machine Learning, Deep Learning, Natural Language Processing.

On 30<sup>th</sup> of September 2020, the Association of Information Technologists (AIT) was inaugurated by Mr. Shanthababu Pandian, Project Manager, Cognizant Technology Solutions.

The welcome speech was given by AIT President Ms. Kaaviya Baskaran. Dr. G. Sumathi, Associate Professor, motivated the students to actively take part in all the activities of AIT. Introduction of the office bearers was given by Mr. V. Rajaram, AIT coordinator and the reading of Annual Report 2019-2021 batch was done by Ms. N. Uma, AIT coordinator.

Mr. Shanthababu Pandian delivered a Special Talk on “Recent Trends in Machine Learning and Deep Learning “. He was introduced by AIT General Secretary Mr. S. Riyenth.

The session lasted for about one and a half hours. The chief guest gave a talk on the below mentioned topics:

1. Introduction to DL, ML, NLP and their applications
2. NLP for Chatbot and voice controlled home automation system using NLP and IOT.
3. About upcoming global level AI trends
4. Reinforcement Learning and Automated ML
5. Short talk on Azure Examination and his experience regarding the same

The session came to an end with the Head of the Department, Dr. V. Vidhya thanking our chief guest and sparking encouragement among the students. Ms. K. Nilavezhil, AIT Treasurer delivered the vote of thanks.

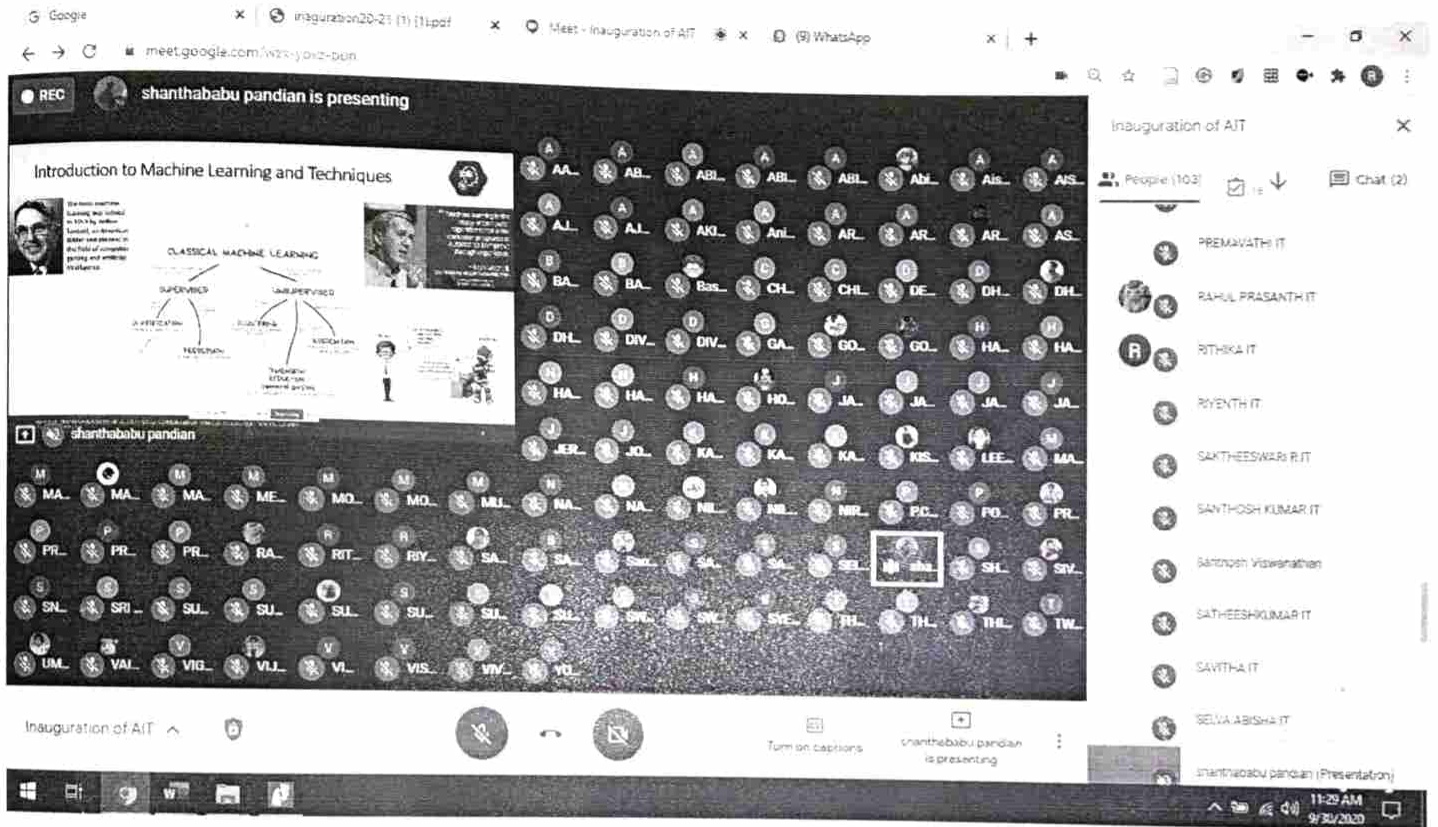
**Outcome of the Program:-**

- Faculty and Students were exposed to DL, ML, NLP and their applications.
- Faculty and Students will now have ideas about upcoming global level AI trends.

  
15/10/2020  
AIT Coordinators

  
HOD/INT

# Screen Shot



Scan to View the Event





**SRI VENKATESWARA COLLEGE OF  
ENGINEERING**  
Pennalur, Sriperumbudur Taluk - 602117



**ASSOCIATION OF INFORMATION TECHNOLOGISTS  
&  
DEPARTMENT OF INFORMATION TECHNOLOGY**

solicit your esteemed presence for the

Valedictory (2019-20) and Inaugural (2020-21) function

&

Special Talk

on

**Recent Trends in Machine Learning and Deep  
Learning**

by

**Mr. Shanthababu Pandian  
Project manager  
CTS**

Venue : Google Meet <https://meet.google.com/wzx-yovz-bun>  
Date : 30th SEPTEMBER 2020  
Time : 11.00 AM





**SRI VENKATESWARA COLLEGE OF  
ENGINEERING**  
Pennalur, Sriperumbudur Taluk - 602117



**AGENDA**

**DATE** : 30.09.2020  
**TIME** : 11.00 AM  
**VENUE** : Google Meet <https://meet.google.com/wzx-yovz-bun>



- Welcome address
- Annual Report & Valedictory function of 2019-20
- Introduction of Chief Guest
- Short note by HOD
- Introduction of office bearers by AIT coordinator
- Special talk by Chief Guest
- Questionnaire and Feedback
- Vote of Thanks

**Coordinators:**

**V. Rajaram AP/IT**

**N. Uma AP/IT**



# SHANTHABABU PANDIAN

Manager - Projects

## PROFILE

Shanthababu has 17+ years of experience in Information Technology (IT). Almost 8+ yrs. as Data & Analytics Technical Delivery Management, Development/Enhancement/Scrum/Support management/Release/Environment/ITIL Service Managements and Client interaction, People management, Project Financial / Operations management, and People management.

On top of this creating YouTube Channels, Writing Technical and Project Management related blogs, Data Science and Machine Learning course designer for Engineering college and Online Training and workshop on technical topics.

## CONTACT

### WEBSITE:

<https://www.linkedin.com/in/shanthababu-pandian-62a92597/>

### EMAIL:

[pandian.shanthababu@gmail.com](mailto:pandian.shanthababu@gmail.com)

## HOBBIES

Listening to music  
Watching and Playing cricket  
Writing technology articles  
Cooking

## EDUCATION

### PG Program in Artificial Intelligence & Machine Learning

University of Texas, Austin

### Post Graduate Certification in Data Science

IIT Guwahati (In-Progress)

### Master of Science in Software Engineering

BITS Pilani

### Master of Business Applications in Systems Specialization

Madurai Kamaraj University, Tamil Nadu

### Master of Technology in Polymer Engineering, Insulation Specialization

Anna University, Chennai, Tamil Nadu

### Bachelor of Engineering in Electronics and Communication

University of Madras, Chennai, Tamil Nadu

## WORK EXPERIENCE

### Cognizant Technology Solutions [Manager - Projects]

June 2004 to till date

## SKILLS

### Project Management

- Agile Delivery Management
- Data & Analytics Technical Delivery Management.
- Service Management ITIL.

### Technology

- Microsoft Technology - .Net, Microsoft SQL server
- MSBI (SSIS, SSRS), Tubule, PowerBI
- Data Science and Machine Learning
- Python, PySpark, PyTorch, Keras and TensorFlow
- BigData Eco Systems (HDFS, Sqoop, Flume, Hive and Spark ML)
- Azure - ADF, ADB, ADLS and others

### Professional Certification

#### Management Certification

- Certified Scrum Master - Scrum Alliance
- Agile Scrum Master - EXIN
- ITIL - Foundation in ITSM

#### Technical Certification

- IBM Data Science Professional Certificate
- Certified Machine Learning Engineer - from Edureka
- Certified Data Scientist - from Edureka
- Azure DevOps - from Udemy
- Microsoft Azure Certification Training - Scientist - from Edureka
- Advanced Predictive Modelling using Python - from Edureka
- Microsoft Certified Database Administrator (MCDBA) for SQL Server
- Microsoft Certified Solution Developer (MCSD) for Microsoft .NET.

### Accolades and Awards

- Idea Champion (2012) And Innovation Champion (2013)
- Awarded Best Innovation Champion Award 2012.
- Best Mentor Manager 2014

**SRI VENKATESWARA COLLEGE OF ENGINEERING**

**DEPARTMENT OF INFORMATION TECHNOLOGY**

To

29 September 2020

**Mr. Shanthababu Pandian**

**Project manager**

**CTS**

Dear Sir,

**Subject:** Invitation – Chief Guest for Special Talk on “Recent Trends in Machine Learning and Deep Learning”- reg.

At the outset we would like to thank you for your graceful acceptance of our invitation to deliver Special Talk on “Recent Trends in Machine Learning and Deep Learning “on 30<sup>th</sup> September 2020, 11am.

Department of IT engages in several activities like Workshops, Expert Lectures, Symposia and Industrial visits aimed to benefit our students and faculty members. These activities equip them to sharpen their technical skills and create awareness & bonding among our students.

Department of IT looks forward to your presence amongst our faculty members & students for sharing of your valuable thoughts and advice on this topic will definitely benefit them.

We thank you once again for accepting our invitation. We eagerly await the interaction with you to enrich our faculty members with your expertise.

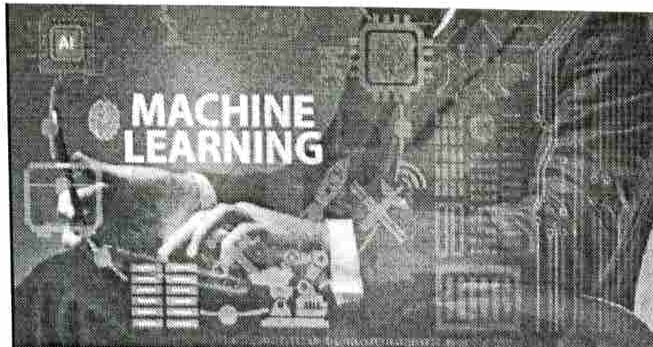
Thank you.

Yours sincerely,

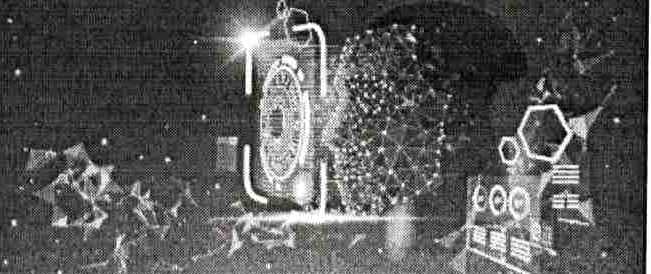
(Dr. V. Vidhya)

HoD /Information Technology

SVCE.



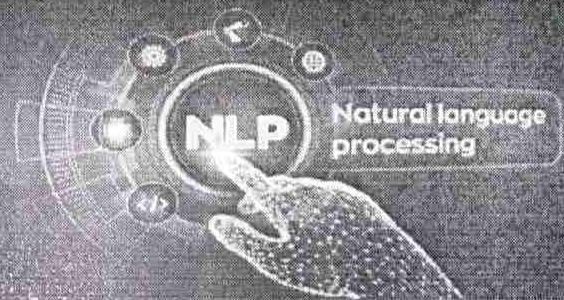
# Deep Learning



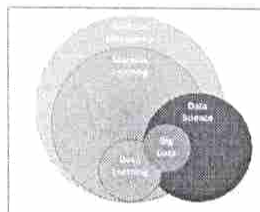
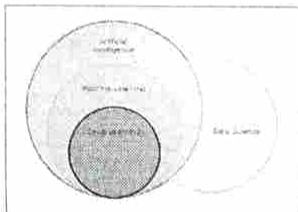
## RECENT TRENDS IN.....

Presented By Shanthababu Pandian

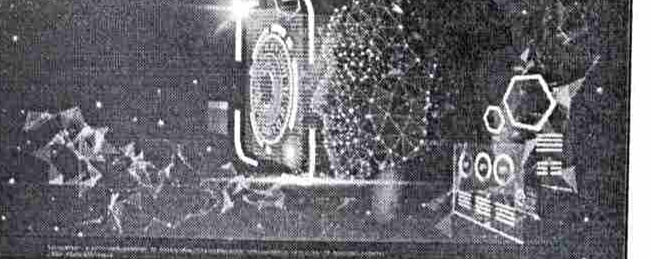
PREPARED BY: SHANTHABABU PANDIAN - BA, DATA & ANALYTICS TECHNOLOGIES AND ARTIFICIAL INTELLIGENCE, VIT VELLORE CAMPUS, VELLORE, TAMIL NADU, INDIA. EMAIL: SHANTHABABU.PANDIAN@VIT-VELLORE.EDU



### AI-ML-DL-BD-DS (Where they are)



### Deep Learning Introduction



Deep learning is a branch of machine learning which is completely based on Artificial neural networks.

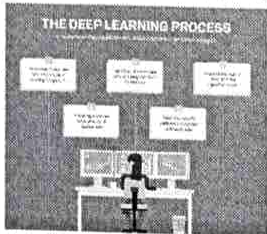
- Deep learning is also a type of neural network.
- It is a type of machine learning which is used to solve complex problems.

Machine Learning	Why it is used
Classification of data into two or more classes	Spam filtering, Recommendation systems
Image and video classification	Image recognition, Face lock, etc.
Spam filtering, etc.	Spam filtering, etc.
Spam filtering, etc.	Spam filtering, etc.
Spam filtering, etc.	Spam filtering, etc.



Deep learning is a branch of machine learning which is completely based on Artificial neural networks.

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- It is a type of machine learning which is used to solve complex problems.

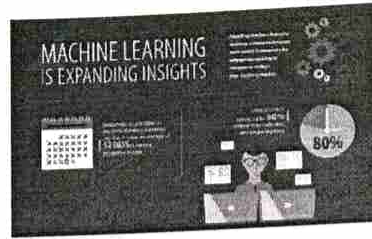
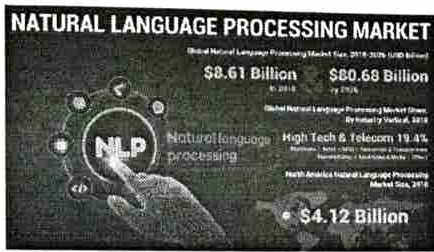


#### Deep Learning Algorithms



- Deep learning has enabled machines to perform complex tasks which were previously considered to be the domain of humans.
- Machine learning is the study of algorithms that can automatically learn and improve from experience without being explicitly programmed to do so.



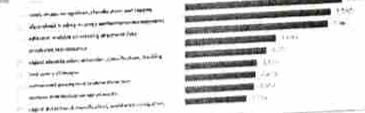


## Big Data and Machine Learning



## 3 Key AI Trends You Should Know

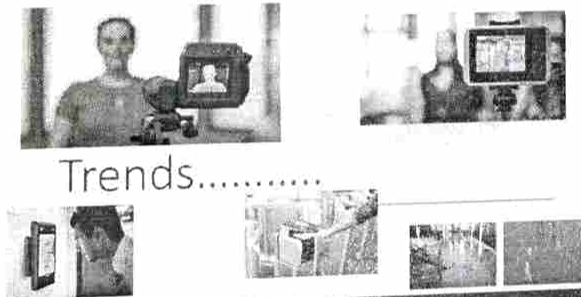
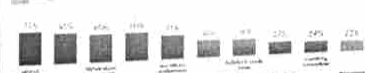
## Global AI revenue forecast by 2025, ranked by use case in billions US dollar



## Percentage of global population with AI in country



## Expected AI revenue by 2025, by country



## Trend

### AI is Helping combat COVID-19

A health-tech ecosystem report from February 2020 revealed AI will help in early diagnosis, contact tracing, and predicting outbreaks.

### How is AI and machine learning helping combat COVID-19?

- Contact tracing and social distancing
- Public transport systems
- Government buildings
- And other important areas

E-commerce giant Alibaba created the 'AI-powered' app to help people track their health and prevent the spread of COVID-19. The platform uses AI to analyze user data and provide personalized health recommendations, including the ability to track and predict outbreaks.



### AI-Driven

In Singapore, one hospital is leveraging AI-powered technology to provide its large temperature checks using smartphones and thermal sensors.



## Trend

### AI Analysis for Business Forecasts



AI-powered business forecasts are becoming increasingly popular. They help businesses understand market trends and make data-driven decisions. AI can analyze large amounts of data to identify patterns and predict future performance.

### Reinforcement Learning

Reinforcement learning (RL) is a type of machine learning that allows a system to learn from its environment through trial and error. It is used in various applications, including game playing, robotics, and autonomous driving.

Self-driving cars are a classic example of reinforcement learning. The car learns to navigate through traffic and avoid obstacles by receiving rewards for successful actions and penalties for mistakes.

A market can be trained using reinforcement learning through trial and error. The system receives feedback on its actions and adjusts its strategy accordingly.

## Trend

### Automated Machine Learning

- Automated machine learning (AutoML) is a type of machine learning that allows users to build machine learning models without the need for extensive programming knowledge.
- AutoML simplifies the machine learning process by automating tasks such as feature engineering, model selection, and hyperparameter tuning.
- AutoML is used in various applications, including fraud detection, image classification, and recommendation systems.
- AutoML is a key trend in the machine learning space, making it more accessible to a wider range of users.

# TrENDS NEvEr STOpS.....



APPLICATIONS OF DEEP LEARNING



Image classification



Video analysis

Video analysis applications



APPLICATIONS OF DEEP LEARNING

- 1. Self-driving cars
- 2. Recommendation
- 3. Fraud detection
- 4. Image recognition
- 5. Social media

- 6. Sentiment analysis
- 7. Text classification
- 8. Machine translation
- 9. Automatic speech recognition
- 10. Document classification
- 11. Recommendation systems

- 1. Natural Language Processing
- 2. Image Recognition and Visual Question Answering
- 3. Sentiment Analysis and Text Classification
- 4. Machine Translation
- 5. Recommendation Systems
- 6. Fraud Detection
- 7. Self-driving Cars

# Natural language processing

## Introduction

### Natural language processing (NLP) is a sub-field of artificial intelligence (AI) concerned with enabling computers to understand and generate human language.

NLP is a branch of AI that focuses on the interaction between natural language and computers.

**Applications of NLP:**

- Machine translation
- Sentiment analysis
- Text classification
- Named entity recognition
- Question-answer systems
- Spelling correction
- Text summarization
- Text-to-speech
- Speech-to-text

**Computational linguistics**

### NLP FOR CHATBOTS

Chatbots are becoming increasingly popular in customer service and marketing.

**Computational Linguistics**

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- Speech-to-text

**Computational Linguistics**

### Smart controlled home automation system using NLP and IoT

Integrating NLP with IoT can create smart home automation systems that respond to voice commands.

**Accelerate Traveler Booking Management with NLP**

# Potential Opportunities in ALML

# Feed Back from Audience

Email Address	Register Number	Name	Year	How sati	How satisfie	upcoming events.	Any additional comments?
sukumart@svce.ac.in		Dr T Sukumar	Faculty	5	5	5 cyber security	
2018#0092@svce.ac.in	180801046	JASI GRACE I	III	5	5	5 Recent trends in IT	
monishmoni5555@gmail.com	180801064	Monishkumar M	III	4	5	5 Conducting events	
2018#0570@svce.ac.in	180801082	S Savitha	III	4	4	4 IOT	
vijayvijey6493@gmail.com	180801105	vijey	III	4	3	3 it is very nice about covid -19	no
2018#0262@svce.ac.in	180801037	GOKUL G	III	5	5	5 deep learn	good and awesome lecture
2018#0717@svce.ac.in	180801076	G Rithika	III	5	5	5 Ethical hacking	
2018#0851@svce.ac.in	180801075	Rahul prasanth k	III	4	5	5 Software testing	
sudharam611@gmail.com	180801092	SUDHA R	III	5	5	5 Data Engineers Role	No
divishe.sendil@gmail.com	180801034	Divyashree SendilKumar	III	5	5	5 Cyber Security,Ethical Hacking	
2018#0280@svce.ac.in	180801073	Premavathi R	III	4	4	4 IOT	
meenakship@svce.ac.in		Meenakshi P	Faculty	5	5	5 useful	
2018#0429@svce.ac.in	180801002	R.Abhishek	III	4	4	4 IOT	
2018#0414@svce.ac.in	180801058	MALINI A R	III	4	5	5 No comments	and useful
2018#0584@svce.ac.in	180801038	Gokulnath M	III	5	5	5 Data Analytics	
abisha066@gmail.com	180801083	SELVA ABISHA D	III	5	4	4 None	
2018#0093@svce.ac.in	180801102	Vaishnavi P	III	5	5	5 NLP	Nothing
2018#0083@svce.ac.in	180801095	Swathi E	III	4	5	5 Machine learning	No comments
Thilakeshtech@gmail.com	180801100	A. Thilakesh Raj	III	4	5	5 Database tools	Nice session
sribalajimsb7@gmail.com	180801088	Sri Balaji M	III	5	5	5 Artificial Intelligence	No.
2018#0270@svce.ac.in	180801001	AARTHI K	III	5	5	5 Big data	
muruganwalker619@gmail.com	180801065	Murugan	III	4	4	4 Full stack Web Development	
2018#0152@svce.ac.in	180801099	THAMODARAN M	III	4	4	4 AI	
navish.vardanaa@gmail.com	180801067	NAVISH VARDANA.A S	III	4	4	4 ethical Hacking fundamentals	
2018#0283@svce.ac.in	180801003	Abilash	III	5	5	5 networks	
2018#010@svce.ac.in	180801026	Chandramoulee.k.v	III	3	4	4 security required in IOT	
nachachitra@gmail.com	180801027	CHITRA S	III	5	5	5 -	Good
2018#0093@svce.ac.in	180801102	Vaishnavi P	III	5	5	5 NLP in detail	Nothing
aiswaryas@svce.ac.in		S Aiswarya	Faculty	5	5	5 NLP	
2018#0604@svce.ac.in	180801031	Dharshan V	III	5	5	5 Cloud computing, Cyber security	
2018#0780@svce.ac.in	180801015	Ananya	III	5	5	5 Any technical topics	Good and informative
jerusha@svce.ac.in		Jerusha S	Faculty	5	5	5 IoT	No comments
2018#0574@svce.ac.in	180801017	Arun Karthik	III	4	4	4 Technology Development	Nothing
2018#0608@svce.ac.in	180801028	Deepika V	III	5	5	5 the field of information	Informative session
mksanthosh2000@gmail.com	180801079	Santhosh Kumar	III	3	3	3 Hacking	Nothing
2019#0522@svce.ac.in	190801053	B.N.Poonam	II	5	5	5 Science & Analytics	and interesting. Ideas on how
muruganwalker619@gmail.com	180801065	Murugan	III	4	4	4 Full stack Web Development	
2018#0152@svce.ac.in	180801099	THAMODARAN M	III	4	4	4 AI	
navish.vardanaa@gmail.com	180801067	NAVISH VARDANA.A S	III	4	4	4 ethical Hacking fundamentals	
2018#0283@svce.ac.in	180801003	Abilash	III	5	5	5 networks	
2018#010@svce.ac.in	180801026	Chandramoulee.k.v	III	3	4	4 security required in IOT	
nachachitra@gmail.com	180801027	CHITRA S	III	5	5	5 -	Good
2018#0093@svce.ac.in	180801102	Vaishnavi P	III	5	5	5 NLP in detail	Nothing
aiswaryas@svce.ac.in		S Aiswarya	Faculty	5	5	5 NLP	
2018#0604@svce.ac.in	180801031	Dharshan V	III	5	5	5 Cloud computing, Cyber security	
2018#0780@svce.ac.in	180801015	Ananya	III	5	5	5 Any technical topics	Good and informative
jerusha@svce.ac.in		Jerusha S	Faculty	5	5	5 IoT	No comments
2018#0574@svce.ac.in	180801017	Arun Karthik	III	4	4	4 Technology Development	Nothing
2018#0608@svce.ac.in	180801028	Deepika V	III	5	5	5 the field of information	Informative session
mksanthosh2000@gmail.com	180801079	Santhosh Kumar	III	3	3	3 Hacking	Nothing
2019#0522@svce.ac.in	190801053	B.N.Poonam	II	5	5	5 Science & Analytics	and interesting. Ideas on how
2018#0794@svce.ac.in	180801108	Vivekanandan M	III	4	5	5 Competitive programming	It was a good experience.
surendharmkns@gmail.com	180801303	SURENDHAR M	III	4	4	4 bitcoin & cryptocurrency	nothing
2018#0127@svce.ac.in	180801110	YOGALAKSHMI S	III	4	5	5 Data analysis	
2018#0158@svce.ac.in	180801057	Madhumitha E	III	4	5	5 Trends in AI	
2018#0158@svce.ac.in	190801077	SHEHA M	II	5	5	5 IOT, Cyber Security	
snehamuthukumar3@gmail.com	180801303	SURENDHAR M	III	4	5	5 Bitcoin & cryptocurrency	nothing
2018#0941@svce.ac.in	180801072	Praveen T	III	4	5	5 Roles in Cybersecurity	usefull to understand about key
2018#0042@svce.ac.in	180801109	YashwanthKumar V	III	5	5	5 Artificial Intelligence	
2018#0068@svce.ac.in	180801078	Roshini.S	III	4	5	5 Artificial intelligence	
roshinisenthilkumar1@gmail.com	180801101	Tweshin Balaji	III	3	3	3 Artificial Intelligence	
tweshin1114@gmail.com	180801007	Aishwarya M	III	5	5	5 Artificial Intelligence	
2018#0605@svce.ac.in	180801059	Manasa	III	4	3	3 Quantum computing	Spent a quality time learning this
manasatagore07@gmail.com	180801301	Dharshan.M	III	4	5	5 Nil	
2018#0942@svce.ac.in	180801056	M S Madhan Kumar	III	4	4	4 Practical Approach	
msmadhankumar123@gmail.com	180801086	Sivakumaaran	III	5	5	5 Cybersecurity	
sivakumaranrnce@gmail.com							