



DAYANANDA SAGAR
UNIVERSITY

Dayananda Sagar University

School of Engineering

Department of Computer Science and Engineering (Data Science)

EVENTS

2021 - 2022

Five days Value added Course “Data Science Skills for Digital Tribe”

Date: 24th-31st Jan 2022

The Dept. of CSE (Data Science) has successfully organized a 5 days value-added course on "Data Science Skills for Digital Tribe". The targeted audience was 2nd Year students of the Department of CSE. The course was organized in virtual mode. Around 100+ students were registered for the course. All students were trained on both theoretical and practical knowledge of the present technologies in the Data Science domain. At the end of the course an evaluation was carried out and the students have performed satisfactorily, feedback was taken from the students and it is found to be satisfactory.

Resource Persons:

Dr. Shaila S G

Dr. Basavaraj N Hiremath

Dr. Kiran B Malagi

Dr. Rajesh T M

Dr. Revathi V

Dr. Pramod Naik

Dr. Renukadevi M N

Prof. Shivamma D

Event brochure:

Dayananda Sagar University
Department of Computer Science and Engineering (Data Science)

Cordially invites you to the
Value added course
on
DATA SCIENCE SKILLS for DIGITAL TRIBE
(24th-31st January, 2022)

Libraries:
Scikit-learn
NumPy

BI Tools:
in-Memory
infuse-self service

32 Hours Course in Virtual Mode

Syllabus

Course Outcomes

24th January, 2022 Module 1: Introduction to Data Science & BI with DAV - 6hrs

25th January, 2022 Module 2: Introduction to Modern tools and Libraries - 6hrs

27th January, 2022 Module 3: Mathematics for Data Science & Data Pre-processing and Feature Extraction - 6hrs

28th January, 2022 Module 4: Machine learning Algorithms & BI tools Self-Service Dashboards - 6hrs

31st January, 2022 Case studies - 8hrs

- Outline the Roles of a Data Analysts and Scientists
- Apply Techniques and Tools for Data Transformation
- Understand the KDD through Data Mining concepts
- Apply Machine Learning Techniques
- Use Data Visualization and Optimization Tools and Techniques

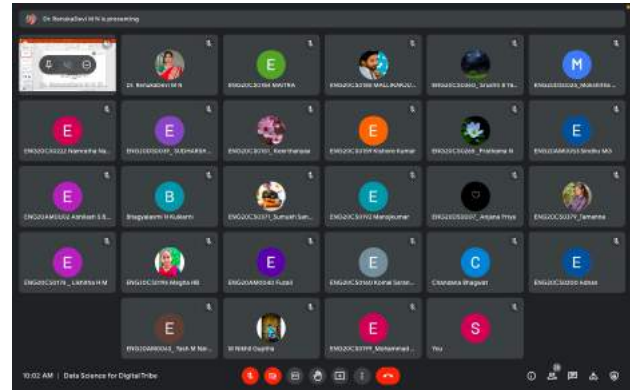
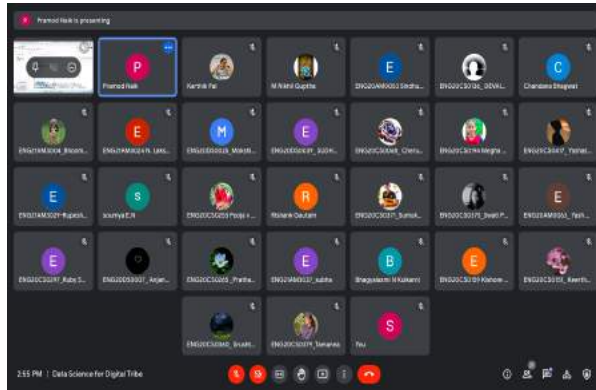
Hurry up

Targeted Audience:
4th Semester Students of CSE Department
Total number of seats - 90 (First Come First Serve)

Registration Link : <https://forms.gle/1GtVChdmD3XK20rS6>

Resource Persons - Faculty of CSE Department
Dr. Girisha G S, Dr. Shaila S G, Dr. Kiran B. Malagi, Dr. Basavaraj N. Hiremath, Dr. Pramod Naik, Dr. Rajesh T M, Dr. Renuka Devi, Dr. Revathi V, Prof. Shivamma, Prof. Pooja Pandey

Few glimpses:



Webinar: “Primer on Data Science Tools and Techniques” Date: 09 April, 2022

The Dept. of CSE (Data Science) has successfully organized a webinar on “Primer on Data Science Tools and Techniques”. The targeted audience was 2nd, 3rd and 4th year students of the all the programs of the Department of CSE, ECE and Mech. The course was organized in virtual mode. Around 100+ students were registered for the course and 90+ students attended the webinar. All students were trained on both theoretical and practical knowledge of the present technologies in the Data Science domain. At the end of the course an evaluation was carried out and the students have performed satisfactorily, feedback was taken from the students and it is found to be satisfactory.

Key Takeaways:

- To provide an insight into real-world industry experience using Data Mining in Finance domain about fraud detection
- To apply Techniques and Tools for Data Transformation
- To apply Machine Learning Techniques and discuss on various performance and parameters
- To make use of Data Visualization and Optimization Tools and Techniques

Resource Person: Ashish Jain

Data Scientist @ Infosys Ltd

Event Brochure:



Dayananda Sagar University
Data Science Program
Department of Computer Science and Engineering
Kudlu Gate, Hosur Main Road, Bengaluru - 560068
In Association with Computer Society of India Bengaluru Chapter, Region-5

Cordially invites you to the Webinar on "Primer on Data Science Tools and Techniques"

About DSU:

Dayananda Sagar Institutions founded in the 60s by visionary, late Sri Dayananda Sagar committed to transform today's students into responsible citizens and professional leaders of tomorrow. Dayananda Sagar University created by an Act of the Karnataka State in 2014, built on this adorable legacy and inspired by its own milestones, is committed to meet the needs of quality higher education in this part of the world. Inspired by Innovation and Incubation (spread over 25,000 sqft of Industry quality labs) form the core of DSU. So it isn't surprising that DSU has taken the next logical step: Laying the foundation to transform the entrepreneurial dream of every young Indian and global citizen into a reality. Enabling this transformation is the active support of Industry leaders, industry bodies and a dedicated 4 lakh square feet modern ready-to-move-in infrastructure!

Objectives of Webinar:

- To provide an insight into real-world industry experience using Data Mining in Finance domain about fraud detection
- To apply Techniques and Tools for Data Transformation
- To apply Machine Learning Techniques and discuss on various performance and parameters
- To make use of Data Visualization and Optimization Tools and Techniques

Data Science Program, Department of Computer Science and Engineering

The Data Science Program in Computer Science and Engineering department actively involves in research & development. It has good collaborations with several industries, academic institutes and research & development organisations.

The Data Science Program envisions to create a great environment for Students/Research Scholars/Faculties to discuss, learn, work and explore on various topics related to Data Science career. The purpose of this Webinar is to provide a platform for learning, information exchange and collaborate on Data Science Activities.

Conveners :

Dr. A. Srinivas
Dean SoE, DSU

Dr. Shaila S G
Chairperson DS, DSU

Dr. Girisha G S
Chairman CSE, DSU

Organizers :

Prof. Shivamma D
Assistant Professor, Data Science Program,
Dept. of Computer Science and Engineering

Dr. Basavaraj N Hiremath
Professor
Dept. of Computer Science and Engineering

For Any Queries Email To:

Prof. Shivamma D
(shivammad-cse@dsu.edu.in)
Dr. Basavaraj N. Hiremath
(basavaraj-cse@dsu.edu.in)

Resource Person



ASHISH JAIN
Data Scientist
@ Infosys Ltd.

09th April, 2022
10 AM - 1 PM

Registration:

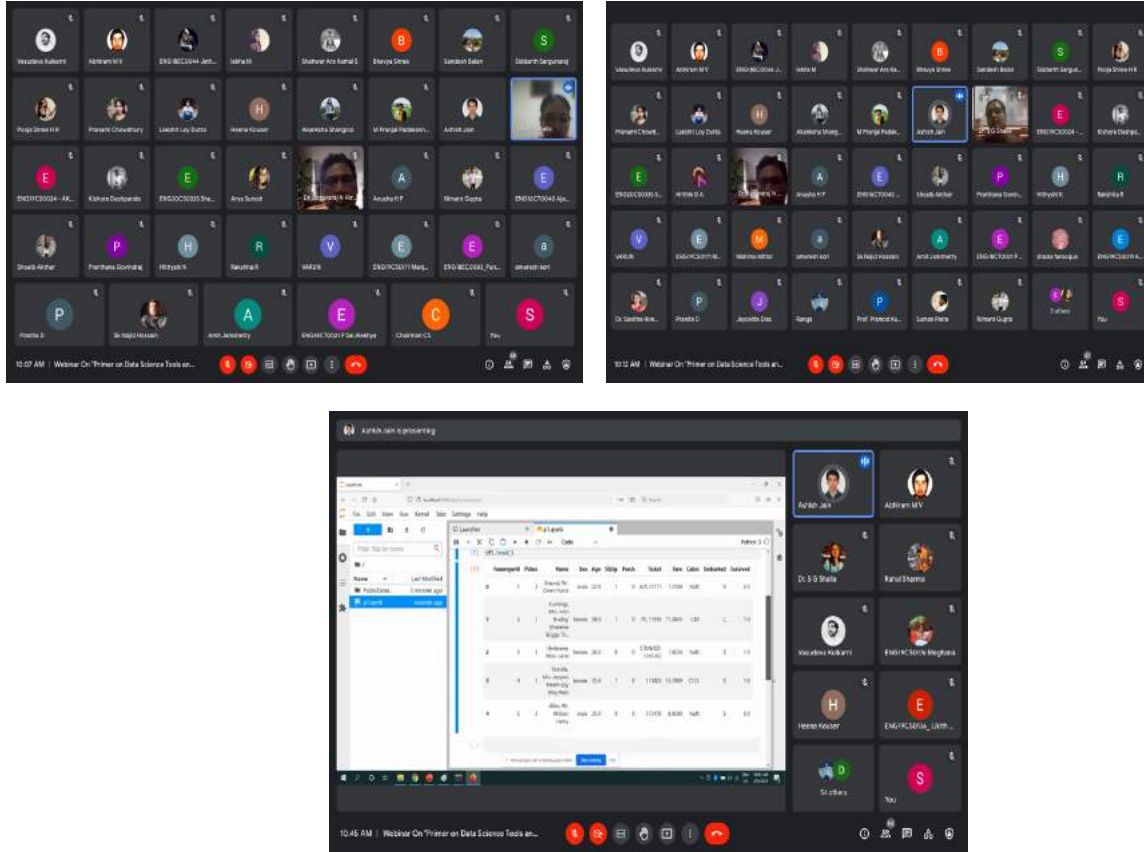
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Note: Please register to get the webinar link

Registration is free.

E- Certificate will be provided on completion of Webinar

Few Glimpses:



Webinar on “Data Analytics in Healthcare”
Date: 23rd April, 2022

The Dept. of CSE (Data Science) has successfully organized a webinar on “Data Analytics in Healthcare”. The speaker Dr. Eesha Sharma was the resource person. The targeted audience was 2nd, 3rd, 4th year students and scholars of all the programs of the Department of CSE, ECE and Mech. The course was organized in virtual mode. Around 100+ students were registered for the course and 90+ students attended the webinar. All students were trained on both theoretical and practical knowledge of the data analysis on healthcare domain and technologies in the Data Science area. At the end of the course an evaluation was carried out and the students have performed satisfactorily, feedback was taken from the students and it is found to be satisfactory.

As the speaker has an expertise in the domain of mental health research, she has discussed the results of demographic data and challenges on data banking with the importance of longitudinal and cross sectional analysis of the data. She has actively guided a few clarifications and queries of the participants.

Resource Person: Dr. Eesha Sharma, Assistant Professor,
Dept. of Child and Adolescent Psychiatry
NIMHANS Bengaluru

Event Brochure:



Dayananda Sagar University
Data Science Program
Department of Computer Science and Engineering
Kudlu Gate, Hosur Main Road, Bengaluru - 560068
In Association with Computer Society of India Bengaluru Chapter, Region-5

Cordially invites you to the Webinar on
"Data Analytics in Healthcare"

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Objectives of Webinar:

- Data collection methods in Mental Health Research
- Challenges in data-banking from the end-user perspective
- Cross-sectional and longitudinal data analysis methods

For Any Queries Email To:
Prof. Shivamma D
(shivammad-cse@dsu.edu.in)
Dr. Basavaraj N. Hiremath
(basavaraj-cse@dsu.edu.in)

Data Science Program, Department of Computer Science and Engineering

The Data Science Program in Computer Science and Engineering department actively involves in research & development. It has good collaborations with several industries, academic institutes and research & development organisations. The Data Science Program envisions to create a great environment for Students/Research Scholars/Faculties to discuss, learn, work and explore on various topics related to Data Science career. The purpose of this Webinar is to provide a platform for learning, information exchange and collaborate on Data Science Activities.

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Dean SoE, DSU

Dr. Shaila S G
Chairperson DS, DSU

Dr. Girisha G S
Chairman CSE, DSU

Organizers : **Prof. Shivamma D**
Assistant Professor, Data Science Program,
Dept. of Computer Science and Engineering

Dr. Basavaraj N Hiremath
Professor
Dept. of Computer Science and Engineering

Prof. Monish L
Assistant Professor, Data Science Program,
Dept. of Computer Science and Engineering

23rd April, 2022
2:00 PM - 4:00 PM

Registration:

Or <https://forms.gle/VKaxveYHBbZueqUuZ>

Note: Please register to get the webinar link

Registration is free.

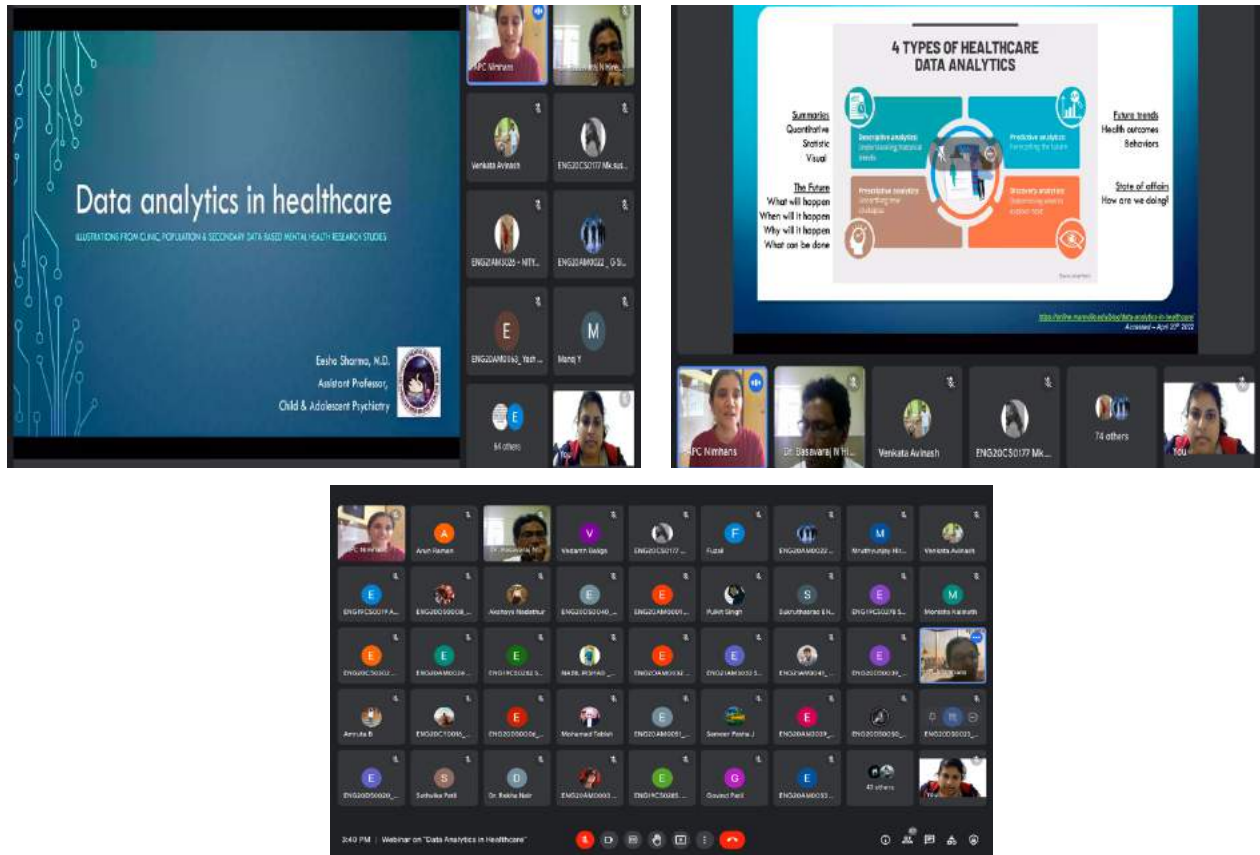
E- Certificate will be provided on completion of Webinar

Resource Person



DR. EESHA SHARMA
Assistant Professor
NIMHANS.

Few glimpses:



“Computer Awareness Program under NSS Activity”

Date: 22nd July, 2022

Data Analytics and Visualization Club, Data Science Program, Dept. of CSE has successfully completed the NSS activity "Computer Awareness Program" on 22nd July, 2022 for the students of Higher Primary School and High School, Cheeluru Bangalore (DSU Adopted Village) organized by the Department of Computer Science and Engineering (Data Science)

Event Brochure:



Dayananda Sagar University

Department of Computer Science and Engineering

Data Science Program

Cordially invites you to the

Computer Awareness Program

under

NSS Activity



Objectives:

- Identify the various benefits of using word processing software & basics of Computer
- Students will be able to claim proficiency in Word, Excel and PowerPoint
- Able to perform documentation and presenting skills.
- Proficient in using Windows, Word Processing Applications, Spreadsheet Applications
- To enable the students to study MS Office and to enrich the practical knowledge in MS Office.

Targeted Audience:

Middle and Upper primary students



Date : 22 July, 2022.



Time : 09:00 AM



Venue : DSU Adopted Government School
(Kiranagere and Cheelur)



Conveners

Dr. A. Srinivas, Dean, SoE, DSU

Dr. Shaila S G
Professor & Chairperson (Data Science)
Dept. of CSE, SoE, DSU

Organizing Committee

Prof. Shivamma D
Assistant Professor
Dept. of CSE, SoE, DSU

Prof. Monish L
Assistant Professor
Dept. of CSE, SoE, DSU

Key Takeaways:

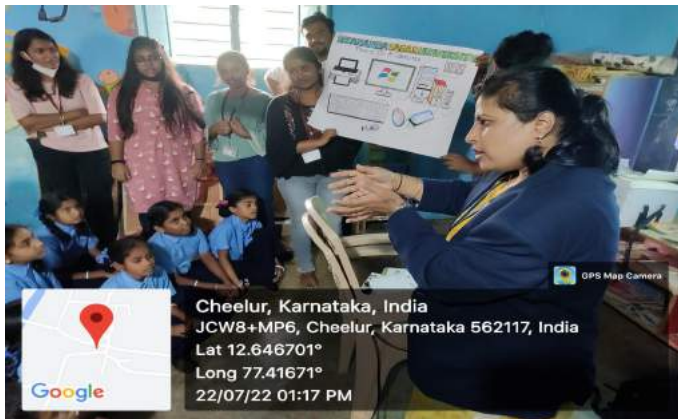
The students from the Data Science program gave a session on the basic knowledge and working of computers, the session was informative and interactive. The students were also given basic knowledge of MS Word, MS PowerPoint and MS Excel. The session has proven to be very inspiring and informative for the students. The mini quiz was conducted to test the knowledge gained by the students, the students were very happy to participate in the quiz.

Educational goals:

- Understanding the basic structure and functioning of input, output, and storage devices such as monitor, keyboard, mouse, speaker, hard disk, CD drive, scanner, and printer.
- Acquire intuitively the ideas of how computers work, acquire mouse skills such as move, click, double click, and drag & drop.
- Operate computer systems in Windows environment and get familiar with basic MS Word, MS PowerPoint and MS Excel.

Learning achievements:

- Students got a basic idea about computers and computer peripherals.
- The presentation was incorporated with supportive images.
- Students were motivated positively by the animation video computer.



Value added course on Machine Learning with Hands On (Tensorflow/Python)

Date: 05th-9th July, 2022 (Offline)

Data Analytics and Visualization club, Dept. of CSE (Data Science) has successfully organized a 5 days Value Added Course on "**Machine Learning with Hands On (Tensorflow/Python)**". The targeted audience was B. Tech and M. Tech students of the Department of CSE. The course was organized in offline. Around 60+ students were registered for the course. All students were trained on both theoretical and practical knowledge of machine learning. At the end of the course an evaluation was carried out and the students have performed satisfactorily, feedback was taken from the students and it is found to be satisfactory.

Resource Person: Dr. Sanjeev Kumar

Professor as Practice

Dept. of CSE (Data Science), SoE, DSU

Event Brochure:

Dayananda Sagar University
Department of Computer Science and Engineering (Data Science)
Cordially invites you to the
Value added course
on
Machine Learning
With Hands On (Tensorflow/Python)
05th-9th July, 2022 (Offline)

INTRODUCTION

- Intuitive solving number puzzles : Familiarize with Machine Learning terminology
- Statistical/Probabilistic ML framework
- Flow of the ML framework analysis
- Strategies for machine learning algorithms (Adaptive vs Batch etc.)
- Introduction to Tensorflow

FEATURE VECTOR METHODS

- General framework of feature extraction
- Focus on 2-d (image) feature extraction

FOUNDATIONS OF STATISTICAL MACHINE LEARNING (General Framework)

- Function Estimation Model
- Risk Minimization

LEARNING PROBLEMS

- Classification (Pattern Recognition and Support Vector Machines)
- Regression (Function estimation)
- Tree Based / Ensemble Based Methods

DEEP LEARNING

- Introduction
- Neural Networks
- Convolutional Networks

INTRODUCTION TO HEALTHCARE APPLICATIONS OF MACHINE / DEEP LEARNING

- Diagnostics, Medical Imaging, Variant Calling, Genomics

IMPLEMENTATION – TENSORFLOW / PYTHON / R

- Hands on – Regression, classification, Support Vector Machine, Neural Nets

Targeted Audience:
B. Tech and M. Tech Students of CSE

Registration Link : <https://forms.gle/BeFo6HcLmiMKCyNe9>

Date : 05th-9th July, 2022. **Time :** 09:00 AM – 5:00 PM

Venue : B Block, Dayananda Sagar University, Campus 3, Kudlu Gate, Bangalore.

Conveners
Dr. A. Srinivas, Dean, SoE, DSU
Dr. Shaila S G
Professor & Chairperson (Data Science)
SoE, DSU

Resource Person
Dr. Sanjeev Kumar
Professor as Practice
Data Science Program
SoE, DSU

Organizing Committee
Prof. Shivamma D
Assistant Professor, SoE, DSU
Prof. Monish L
Assistant Professor, SoE, DSU

Hurry up

Key Takeaways:

Five days Machine Learning (ML) Value added course with hands on was conducted Dr. Sanjeev Kumar. He covered from basics of machine learning such as how intuitive human learning translates to machine learning, inductive vs reductive learning, hypothesis space and mathematical preliminaries to probabilistic and statistical framework of machine learning. Next some of the learning algorithms (Stochastic Gradient etc.) were covered. Some of the specific topics in supervised learning like various types of classification and regression methodologies and algorithms were taught. Then the geometric Neural networks and convolution neural Networks with brief ideas on Support Vector Machines were covered. Brief introduction to tensorflow was also provided to enable the participants to understand the hands on and implementation sessions better.

While mostly participants shown keen interest in theory sessions and interacted with questions, this training also had the hands on using python code and tensor flow libraries. The students and faculties attended and interacted well in these sessions as well with keen interest and various implementation related queries on regression, Bayes classification and Convolution Neural network (CNN) specifically on image feature extraction in CNN. Overall it was a great discussion and learning for the participants.

