

A Report on
Five Days International Level Student Workshop on “Data Science Using Python”
Organized by Department of Computer Science Engineering – (Data Science)
in association with Brainovision Solutions India Private Limited

February 19, 2024 – February 23, 2024



Madanapalle Institute of Technology & Science
(UGC - Autonomous)
Madanapalle-517325, Annamayya(Dt.), Andhra Pradesh, India

Computer Science & Engineering (Data Science)
INTERNATIONAL LEVEL
STUDENT WORKSHOP
on Data Science using Python

Join us for a **one week** of digital transformation and innovation as we host the most extensive student workshop on **Data Science using Python** ever. With participation from over **500+** colleges international wide and more than **1,00,000+** eager students, this event promises to be a game-changer in the world of data science and Python programming.

Chief Guest
Dr Buddha Chandrasekhar
Chief Coordinating Officer - AICTE
All India Council for Technical Education

In Association with


19th – 23rd Feb 2024
07:00 PM – 08:30 PM

Select Host College: Madanapalle Institute of Technology & Science

www.brainovision.in/student-workshop-2024
Participation Certificate will be provided
Top 50 Students will get Free Internship
REGISTER NOW

Student Registrations are opened
Fee Rs.09/- Only ~~Rs.999/-~~
Fee May Increase after soon

<p>Chief Patron Dr. N. Vijaya Bhaskar Choudary , Ph.D Secretary & Correspondent</p>	<p>Patron Mrs. Keerthi Nadella Executive Director</p>	<p>Program Chair Dr. C. Yuvaraj Principal</p>
<p>Convener and Coordinator Dr. S.Kusuma HOD , Department of CSE-DS</p>	<p>Staff Coordinators Dr. K.Lokeshwaran , AP/CSE-DS Mr. G.Rajkumar , AP/CSE-DS</p>	

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Report Submitted by: Dr. K. Lokeshwaran, Assistant Professor, Department of CSE-(Data Science), MITS.

Resource Persons: Ganesh Nag Doddi, Founder & CEO – Brainovision; R V N G Sai Eswar, Director – Brainovision; Yasaswi Surabhi, Cloud Developer – Brainovision.

Chief Guest: Dr. Buddha Chandrasekhar, Chief Coordinating Officer - AICTE, All India Council for Technical Education.

Total Participants: 66862 Participants from all over India.

Host College Registration: 1035 Participants

Report Received on 27.03.2024.

Mode of Conduct: Online

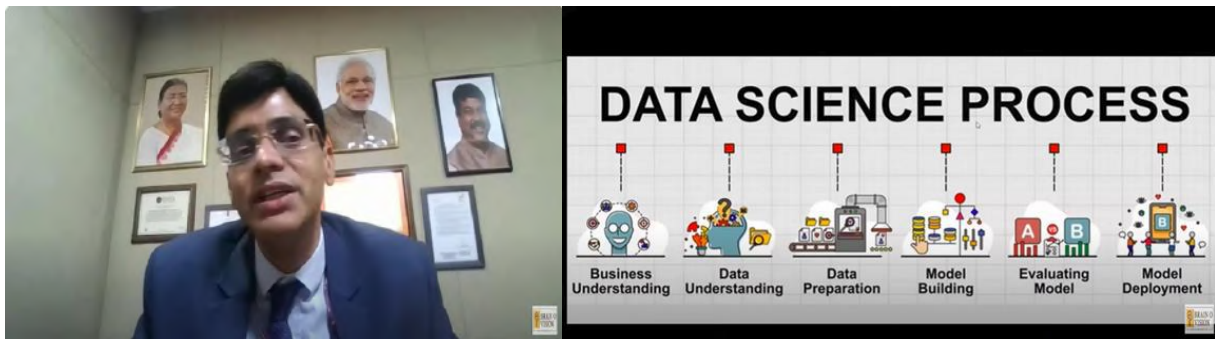
About the FDP

A meticulously organized five-day workshop, aimed at demystifying the realms of Data Science and Python for students, was successfully conducted in collaboration with Brainovision and the All-India Council for Technical Education (AICTE). This virtual event saw the participation of 174 esteemed institutes, fostering a vibrant educational ecosystem focused on data manipulation, visualization, analysis, and the foundational principles of Machine Learning (ML), culminating in hands-on training with Scikit-Learn for practical implementation.

The workshop was graced by the presence of Dr. Buddha Chandrasekhar, the Chief Coordinating Officer of AICTE, who served as the Chief Guest. His insights set a profound tone for the event, which was further enriched by daily sessions led by distinguished guests, each an expert in their respective fields. This initiative was designed to bridge the gap between academic knowledge and practical skills, preparing students for the dynamic challenges of the tech industry.

Inauguration

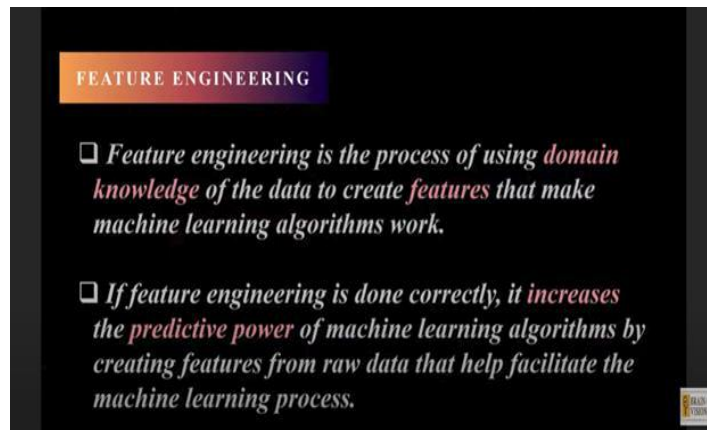
The inaugural day of the workshop began with a solemn prayer song, setting a reflective tone for the event. Following this, an introduction was provided to Brainovision and the esteemed host colleges, creating a foundation of understanding and appreciation for the collaborative efforts behind the workshop. The inauguration segment reached its zenith with an insightful speech delivered by the Chief Guest, Dr. Buddha Chandrasekhar, Chief Coordinating Officer of AICTE. His words not only inaugurated the event but also inspired the participants for the sessions ahead.



Day 1: Introduction to Data Science and Python Programming

The workshop's first technical session introduced participants to the core principles of Data Science and its significant impact across various sectors. The session demystified the fundamental concepts of Python programming, covering essential topics such as variables, data types, and basic operations in Python. This foundational knowledge aimed to equip the attendees with the necessary tools for data manipulation and analysis.

Day 2: Mastery in Data Manipulation and Visualization



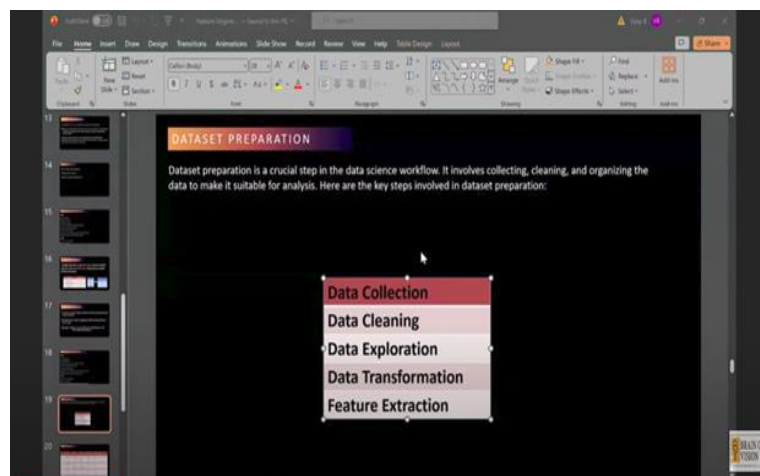
Session 1: Data Manipulation with Python

This session focused on enhancing the participants' skills in data manipulation using Python. Attendees were guided through the intricacies of working with diverse data structures such as lists, dictionaries, and pandas data frames. The session emphasized data loading and manipulation techniques, providing a hands-on experience in managing data.

Session 2: Data Visualization Techniques

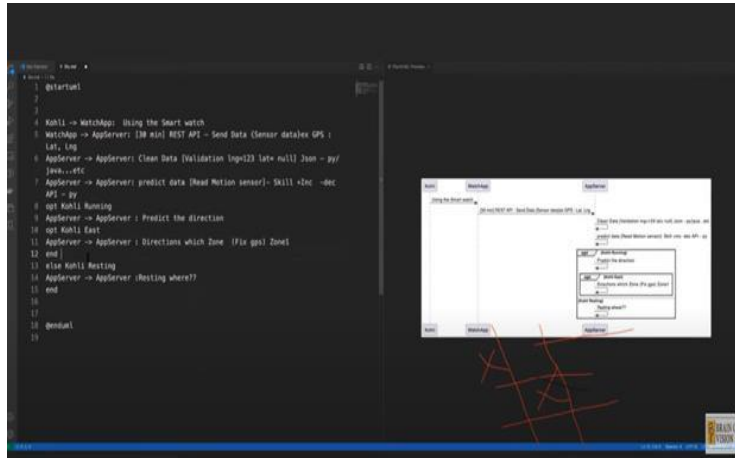
The second session of the day introduced the participants to the art and science of data visualization. Leveraging libraries like Matplotlib, the attendees learned to craft visually compelling charts and graphs, a crucial skill for analyzing and presenting data effectively.

Day 3: Data Analysis Using Python



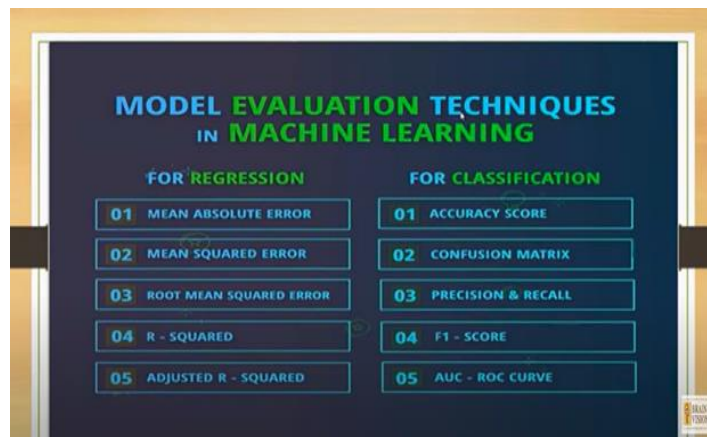
The workshop continued with an in-depth exploration of data analysis utilizing the Pandas library in Python. The session covered essential processes such as data cleaning, preparation, and exploratory data analysis (EDA), empowering participants with the skills to uncover insights from data.

Day 4: An Introduction to the World of Machine Learning



This session was dedicated to unraveling the complexities of Machine Learning (ML). Participants gained a clear understanding of key ML concepts, including the differentiation between supervised and unsupervised learning, and the foundational steps in building ML models.

Day 5: Practical Machine Learning with Scikit-Learn



The final day of the workshop provided a comprehensive introduction to the Scikit-Learn library, a powerful tool for machine learning in Python. Participants learned to construct, train, and evaluate ML models, applying these techniques to real-world datasets. This session aimed to bridge the gap between theoretical knowledge and practical application, ensuring attendees left with the capability to implement ML solutions confidently.

Each session was meticulously designed to build upon the previous one, ensuring a cohesive and comprehensive learning journey for the participants. Through this structured approach, the workshop aimed to equip aspiring data scientists and Python programmers with the skills necessary to navigate the rapidly evolving tech landscape.

Student Certificate Sample



Outcomes of the workshop:

The outcome of this workshop was multifaceted, aiming to enrich participants with both theoretical knowledge and practical skills in data science and machine learning using Python. Here are the key outcomes and impacts of the workshop:

1. **Foundation in Data Science and Python:** Participants acquired a solid understanding of the fundamentals of data science and Python programming.
2. **Enhanced Data Manipulation Skills:** Through hands-on sessions on data manipulation using Python, attendees developed the ability to work with various data structures and perform complex data manipulation tasks.
3. **Proficiency in Data Visualization:** Participants learned to effectively visualize data using libraries like Matplotlib.
4. **4. Comprehensive Understanding of Machine Learning:** The workshop demystified machine learning concepts for the participants, covering both supervised and unsupervised learning.
5. **Practical Machine Learning Application:** By introducing the Scikit-Learn library and guiding participants through building, training, and evaluating machine learning models, the workshop ensured that attendees could apply their knowledge to real-world datasets.
6. **Networking and Collaborative Learning:** The virtual mode of the workshop facilitated interaction among participants from 174 different institutes.
7. **Inspiration and Motivation:** The presence of esteemed guests and industry experts, including the Chief Guest Dr. Buddha Chandrasekhar, provided participants with inspiration and motivation.