

Department of Computer Science
STAR-DBT ACTIVITIES
2020-21

Seminars/ workshops/Exhibitions

Academic year	Nature of program	Dates/Duration	Title of Program	Number of beneficiaries
2020-2021	International E-Conference	7 th to 9 th October 2020	“Advanced Computing Technologies”	390
	National Level Online FDP	8th to 17th February 2021	“DataScience using Python”	110
	Workshop	22 nd to 27 th March 2021	“Machine Learning”	48
	Certificate course conducted by NSIC	11 Days ,8 th to 31 st March	“Android”	10
	NSIC Certificate course	11 Days ,4 th to 23 rd March 2021	“Data Science”	10
	Internship Certificate Course NSIC	30 days ,31 st March 2021	“Artificial Intelligence using Python”	35

**Report on
International E-Conference on
Advanced Computing Technologies (ICACT) 2020**



BHAVAN'S VIVEKANANDA COLLEGE

of Science, Humanities & Commerce

Sainikpuri, Secunderabad - 500094

Accredited with 'A' Grade by NAAC

Autonomous College - Affiliated to O.U

**INTERNATIONAL E- CONFERENCE
ON ADVANCED COMPUTING TECHNOLOGIES - 2020**

(UNDER DBT-STAR COLLEGE SCHEME)



7th - 9th OCT, 2020

**ORGANIZED BY
DEPARTMENT OF
COMPUTER SCIENCE**



BHAVAN'S VIVEKANANDA COLLEGE

of Science, Humanities & Commerce

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Department of Computer Science



Coordially invites you

INTERNATIONAL E- CONFERENCE

ADVANCED COMPUTING

TECHNOLOGIES-2020

7th to 9th October, 2020

UNDER DBT-STAR COLLEGE SCHEME

Programme Schedule

(as per IST)

7th October, 2020



10.00 AM : Inaugural Session

Chief Guest & Keynote Speaker

Dr. DVLN Somayajulu
Director, IIITDM Kurnool.



Guest of Honour

Dr. K. Shyamala
Professor, Dept. of CSE & Dean, Faculty of Informatics, Osmania University, Hyderabad

12.00 Noon : Paper Presentations - Session Chair

Prof. Poola. R. K. Murti, Formerly with University of Hyderabad and NALSAR University of Law



02.30 PM : "Blockchain Technology Privacy, Security and Applications"

Mr. G. Mahesh Kumar
Asst. Professor, Dept. of Computer Science, Bhavan's Vivekananda College,
Sainikpuri, Secunderabad, Telangana State, India.

8th October, 2020



**10.00 AM : "Deep Learning Architectures for Adverse Drug Event
Extraction from Heterogenous Information Sources"**

Dr. Bharath Dandala
Research Staff Member- Watson EMRA, USA

11.00 AM : Paper Presentations - Session Chair

Dr. N. S. Chakravarty, Head, Dept. of Management Studies,
Bhavan's Vivekananda College

01.00 PM : Paper Presentations - Session Chair

Prof. S. Jeelani, Director, Center for Distance and Virtual Learning, University of Hyderabad



03.00 PM : "IT Service Management, Service Delivery, and Security"

Mr. Clinton Randall IV
Senior Director, IT Service Management at Integral Consulting Services Inc., USA
innovative enterprise IT management professional leading Integral's Ivanti, CA and BMC
Services practices

9th October, 2020



10.00 AM : "Introduction to Deep Learning and Applications"

Dr. Bapi Raju S
Professor, Cognitive Science Lab, IIIT Hyderabad

11.30 AM : Paper Presentations - Session Chair

Prof. M. V. Ramanamurthy, Head, Dept. of M&H, MGIT, Hyderabad



12.30 PM : Valedictory Program

Chief Guest

Dr. C. Goverdhan,
Associate Professor, Department of Mathematics, University College of Science,
Osmania University, Hyderabad

Day-1:(October7,2020)

A 3-Day **International E-Conference on Advanced Computing Technologies- ICACT 2020** was organized by the Department of Computer Science of **Bhavan's Vivekananda College, Sainikpuri Secunderabad.**

The Inaugural Session of the conference began with a prayer invoking the blessings of Almighty. **Prof. Y Ashok, Principal, Bhavan's Vivekananda College**, welcomed all the national and international dignitaries invited for the conference along with the participants who had submitted their research papers to be presented at the conference. **Mrs. KVB Saraswathi, Convener**, gave the report on the Conference. She stated that there was a very good response in the number of papers received, both from National and International forums which would be published in very reputed Indexed journals such as - Scopus or Web of Science after they are subjected to review.

The **Chief Guest** for the Inaugural Session was **Dr. DVLN Somayajulu Garu, Director, Indian Institute of Information Technology, Design and Manufacturing, Kurnool, Andhra Pradesh**, a renowned academician. His session highlighted the importance of Artificial Intelligence, and its impact in the area of industry, education and other fields. He motivated the students towards Innovations in Artificial Intelligence and Machine Learning through RAISE-2020(Responsible Artificial Intelligence for Social Empowerment) initiated by the Ministry of Electronics and Information Technology in association with NITI Aayog. He also focused on the changes that were made towards education through National Policy-2020 to encourage the students towards research.

The **Guest of Honor** for the session was **Dr K Shyamala, Professor, Dept. of CSE, Dean, Faculty of Informatics, Osmania University, Hyderabad**. Her talk was very enlightening as she focused on the challenges being posed in terms of Data Security on Social Media.

The Inaugural session was followed by Paper Presentations in Track-I. Papers were presented on various topics such as Network Security, Wireless Networks, Big Data, Deep Learning, and Artificial Intelligence.

In the afternoon session, **Mr. G Mahesh Kumar**, Assistant Professor, Department of Computer Science, and Co-Convener of the International E-Conference, spoke at length on the topic "Blockchain technology- Security, Privacy and Applications".

The day's events concluded with this session.

Around 390 participants in the form of academicians, teaching faculty, research scholars and Industry Personnel took part on Day 1 of the conference.

Day-2: (October 8,2020)

The Day-2 of the International E-Conference on Advanced Computing Technologies (ICACT-2020) began with a prayer song, and a briefing on the events that were held on Day-1.

The Session-1 began with an eloquent introduction of the Speaker, Dr Bharath Dandala,

Dr. Bharath Dandala is a Research Staff member working for *Watson EMRA, USA*. He delivered an incisive talk on the topic "Deep Learning Architectures on Adverse Drug Event Extraction from Heterogeneous Information Sources". He discussed in detail about the Clinical Natural Language

Processing, the software and the tools used for NLP and the role of Artificial Intelligence in Clinical and Drug Diagnosis.

The morning session was followed by two tracks of Paper presentations on topics related to : Data Mining, Artificial Intelligence, Cloud Computing, Internet of Things and so on.

The afternoon session also had an eminent International Speaker, **Mr. Clinton Randall IV**, *Senior Director, IT Service Management, Integral Consulting Services Inc., USA*. He spoke extensively on his area of expertise- “IT Services Management, Service Delivery and Security”.

Both the sessions of the day were very insightful, bringing in the latest developments in the field of technology to the participants.

The Day2 of the E-Conference saw a participation of around 170 participants.

Day-3:(October 9,2020)

The Day 3 of the International E-Conference began with a lecture by **Dr. S BapiRaju**, *Professor, Cognitive Science Lab, IIIT, Hyderabad* on the topic “Introduction to Deep Learning”.

He focused mainly on Convolutional Neural Networks which could be applied to analyze visual imagery. He also elucidated on the shift invariant or space invariantartificial neural networks, based on their shared-weights architecture and translation invariance characteristics.

The Chief Guest for the Valedictory session was **Dr. C Goverdhan**, an Associate Professor in Mathematics at University College of Science, Osmania University. Mrs. KVB Saraswathi ,was the Convener of ICACT-2020, Mr. N Bhaskar and Mr.G Mahesh Kumar were the Co-Conveners who were present for the valedictory session.

The Day 3 of the e-conference had 214 participants .There were altogether 4- tracks of paper presentations for all the three days on topics like- Artificial Intelligence, BigT Data, Cloud Computing, Deep Learning, Machine Learning,Internet of Things, Cyber Security, Network Security and other related areas.

The program concluded with Vote of thanks.



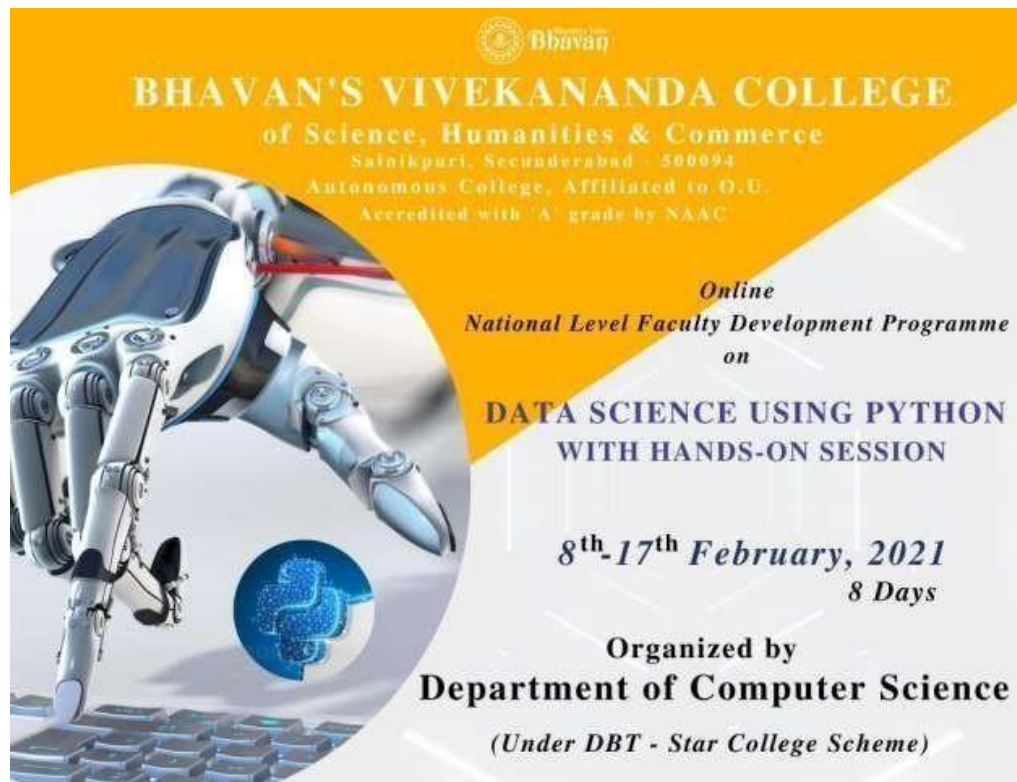




Report on

DATA SCIENCE USING PYTHON

An 8-day National Level Online Faculty Development programme is being organised by



Department of Computer Science, Bhavan's Vivekananda College, under DBT-Star college scheme from 8th February 2021 to 17th February 2021.

Day 1:

The day 1 began with Mr.P.Srinivasa, incharge of FDP, welcoming the participants. It was followed by the welcome address by Mrs. KVB Saraswathi, HOD Computer Science.

The first session was taken by one of the senior faculties of the Department of Computer Science, Mrs K.Padma Priya on the installation of Anaconda and the basic concepts of Python. The session was continued by Mr G.Mahesh Kumar, Assistant Professor, Department of Computer Science, where he demonstrated regarding Python Data Structures.

There were 110 participants in the session.

Day 2:

The day 2 began with the inaugural of the programme where Vice Chairman Air Cmde.J.L.N Sastry, VSM and Principal Prof Y.Ashok addressed the participants. Mrs KVB Saraswathi, Head Department of Computer Science welcomed the speaker of the programme, **Mr.Shaskank Agoyanker**. The topics covered for the day include introduction to numpy and pandas, creation and retrieval of data from a file into Jupyter Notebook, downloading a dataset from Kaggle and working with dataset using various functions available in Python.

There were 90 participants in the session.

Day 3:

The day 3 session was on data cleaning methods and graph plots where various graph types were demonstrated. The topics discussed of day that were covered are:

- ☐ Exporting Data to various formats
- ☐ Cleansing Data with Pandas
- ☐ Data Manipulation steps (Sorting, filtering, duplicates, merging, appending, sub setting,
- ☐ derived variables, sampling, Data type conversions, renaming, formatting etc)

There were 82 participants in the session.

Day 4:

The day 4 session was on supervised machine learning. The topics discussed of day that were covered are:

- ☐ Supervised Machine Learning algorithms with examples(case studies) using python.

There were 67 participants in the session.

Day 5:

The day 5 session was on unsupervised machine learning. The topics discussed in the session are:

- ☐ Unsupervised Machine Learning algorithms with examples (case studies) using

PythonThere were 82 participants in the session.

Day 6:

The day 6 session was on data analysis. The topics discussed in the session are:

- ☐ Introduction exploratory data analysis
- ☐ Descriptive statistics, Frequency Tables and summarization
- ☐ Univariate Analysis (Distribution of data & Graphical Analysis)
- ☐ Bivariate Analysis(Cross Tabs, Distributions & Relationships, Graphical Analysis)
- ☐ Creating Graphs- Bar/pie/line chart/histogram/ boxplot/ scatter/ density etc)
- ☐ Data Visualization – Seaborn, Matplotlib
- ☐ Google Maps Visualization –Plotly, Coronavirus 2019-20 Visualization on World Map
- ☐ Time series Plot of Novel Covid19 Data.

There were 64 participants in the session.

Day 7:

The day 7 was on Deep Learning. Various deep learning techniques were discussed. The topics coveredin the session include:

- Single & Multi-layered Neural Networks
- Perceptron , Concept of Single Neuron , Logic gates , Inputs, weights, biases
- Various activation functions in neural networks – Unit Step, Sigmoid, ReLu, Softmax, andhyperbolic functions , Single Layer Perceptron
- Introduction to Multilayer Neural Network , Concept of Deep neural networks ,Multi-layerperceptron
- Capacity and Overfitting ,Neural network hyperparameters
- Backpropagation convergence , Forward propagation, overfitting, hyperparameters

- Training of neural networks
- The various techniques used in training of artificial neural networks
- Gradient descent rule , Perceptron learning

There were 68 participants in the session.

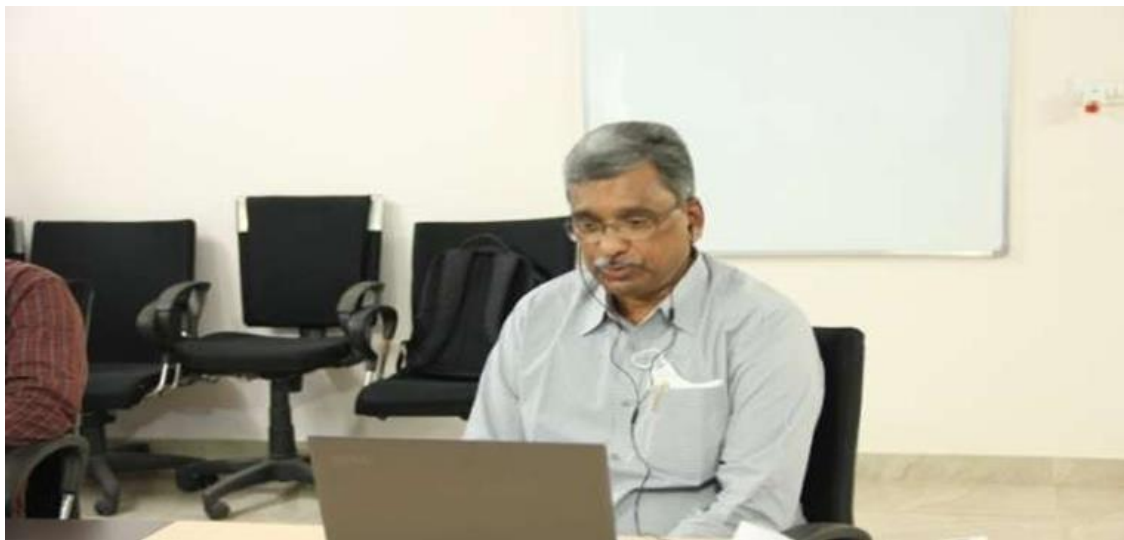
Day 8:

The day 8 session was on Neural Networks. The topics discussed were:

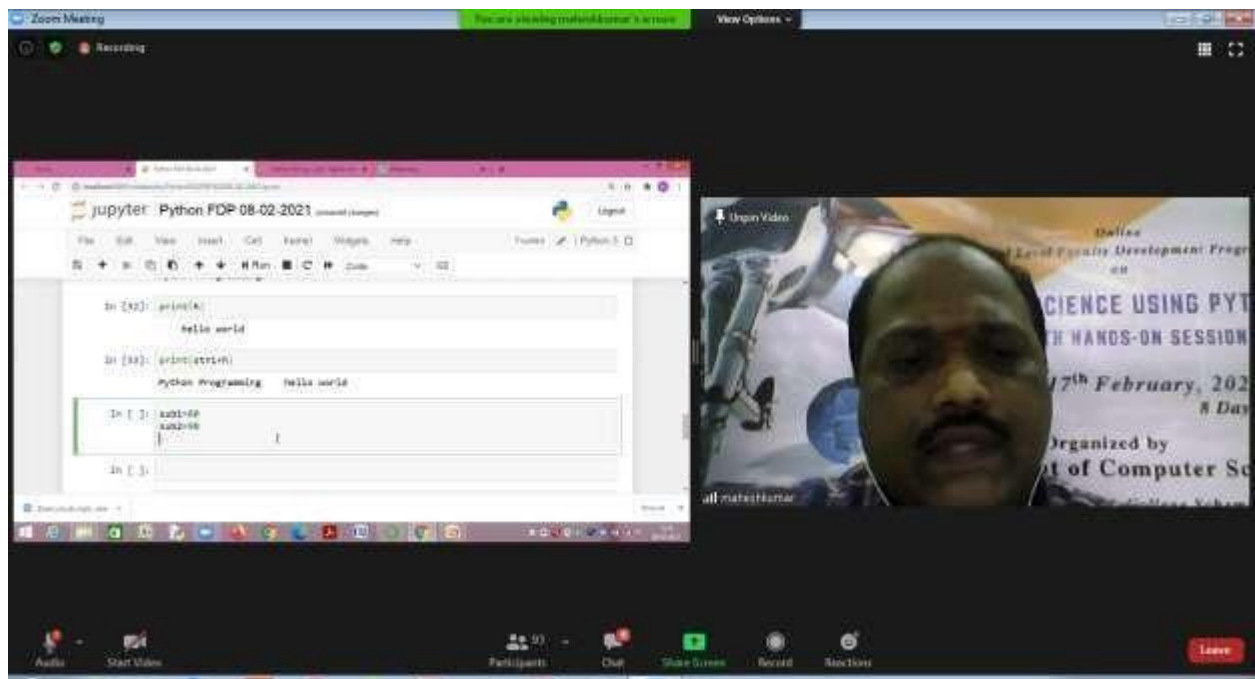
- CNNs (Convolutional Neural Networks)
- Convolutional Neural Network
- Understanding the architecture and use-cases of CNN
- Pooling Layer, how to visualize using CNN?
- How to fine-tune a convolutional neural network
- What is transfer learning, Kernel filter, Feature maps, and pooling
- Deploying convolutional neural networks in TensorFlow.

The 8-Day FDP concluded with the valedictory session. Principal, Prof Y Ashok, Bhavan's Vivekananda College was the Chief Guest for the Valedictory. He had appreciated the efforts of the Department in taking up the FDP and the Speaker for an informative session.

The day wise report was given by Mrs. KVB Saraswathi. The program ended by the vote of thanks of Mr.P. Srinivasa. There were 89 participants in the session.







Report on MACHINE LEARNING WORKSHOP

The department of computer science organized the Machine Learning Workshop under DBT-Star College Schemet for BCA III Year students of our college, scheduled from 22nd March 2021 to 27th March 2021. **Mr. L Venkata Rama Raju**, founder of Data Jango Technologies, was the resource person for this workshop. This workshop was conducted through online platform Microsoft Teams under the guidance of **KVB Saraswathi** (Head, Department of Computer Science) and **G Mahesh Kumar** (Course Coordinator of BCA).

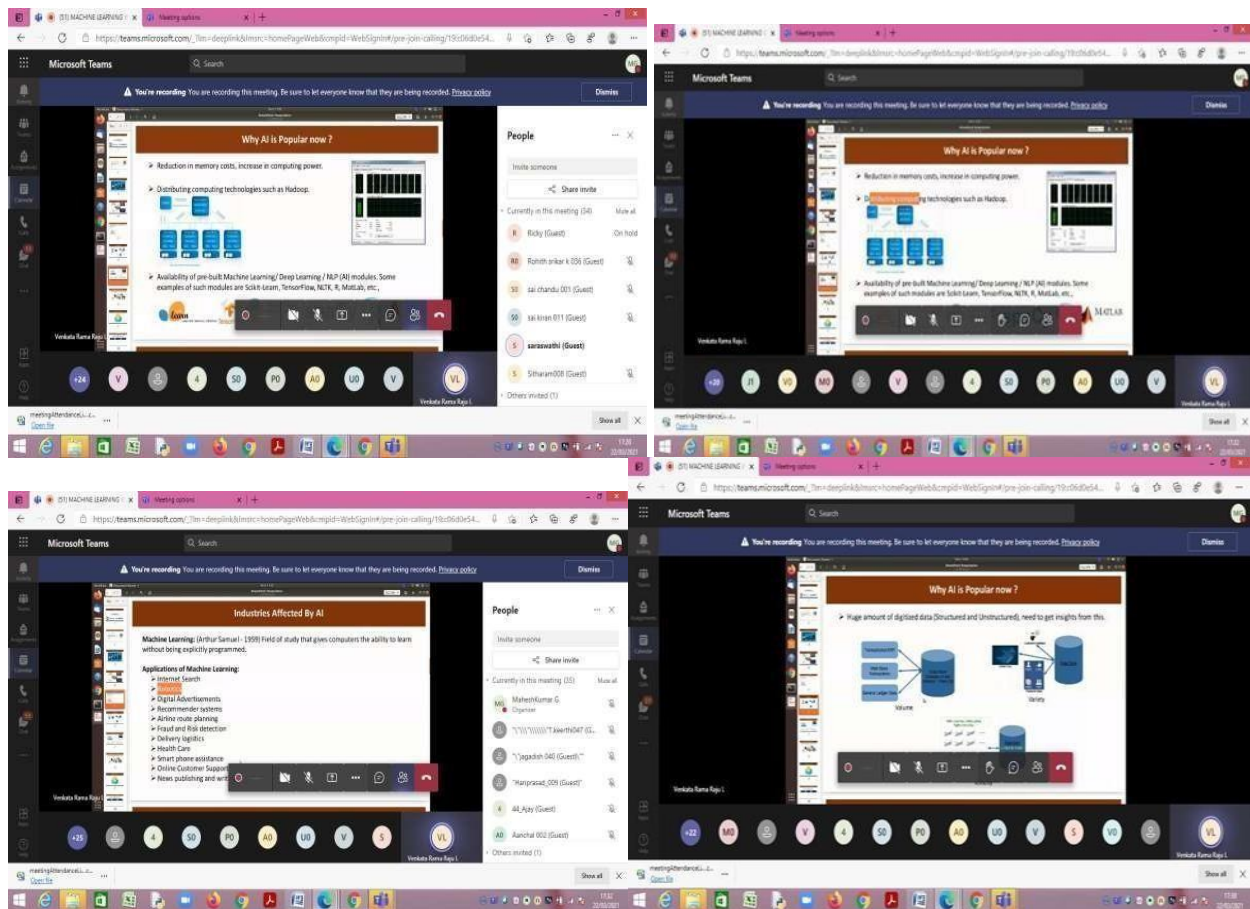
Day 1:

The Day-1 Session has started with the Introduction to Data Science and Machine Learning which was very interactive session where students and faculty has participated very actively. At the end of session, Mr. Venkata Rama Raju has clarified student's doubts and explained their queries by some of the Real-World Practical examples.

The topics covered in the session were:

- ☐ Introduction to AI
- ☐ AI-Industrial Revolution

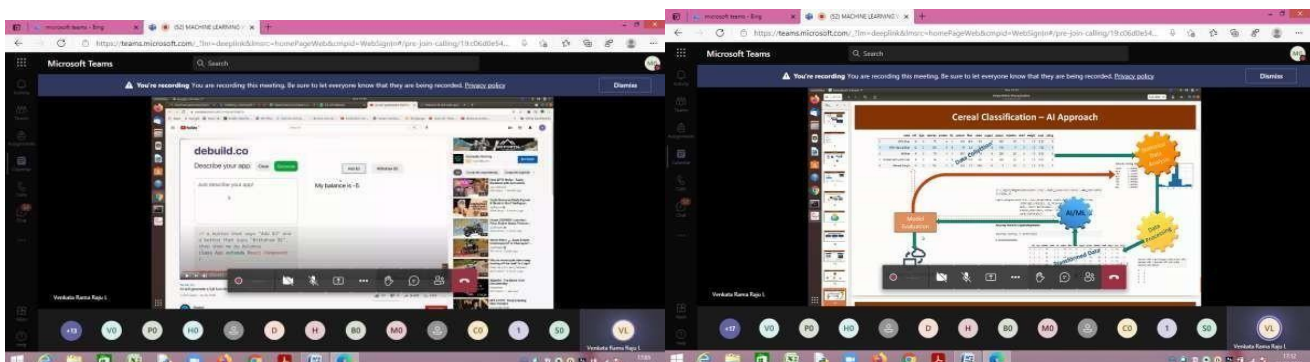


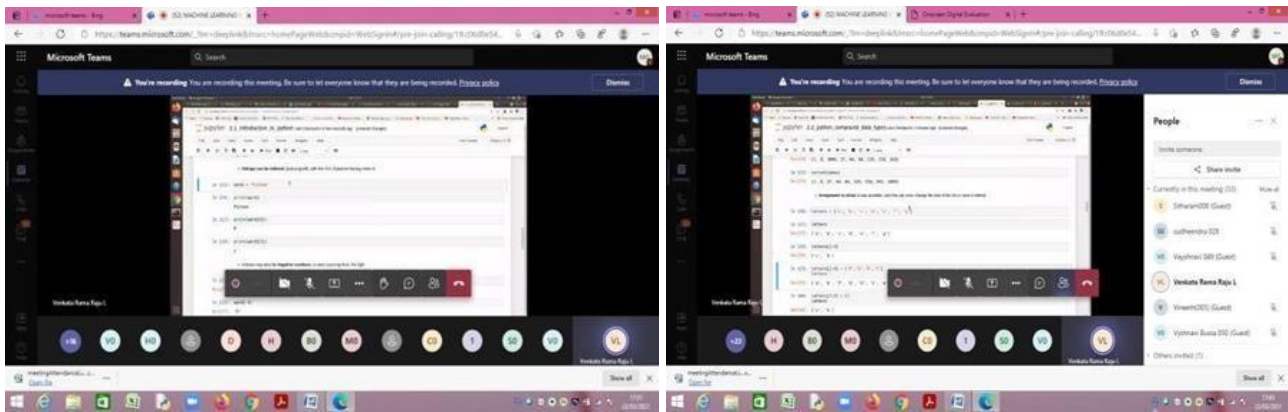


Day2:

The Day-2 Session has started with the Introduction to Python and also given some practical examples for python. The Session followed by Installation of Anaconda Software which is used for compiling python also many other programming languages. The topics discussed were:

- ☐ Variable Declaration
- ☐ Compound Datatypes
- ☐ Control-flow Statements- Lists, Strings, Tuples, Sets, Dictionaries and List Comprehension.
- ☐ Data Manipulation Steps- Sorting, slicing, filtering, appending, subsetting, etc.
- ☐ Keywords
- ☐

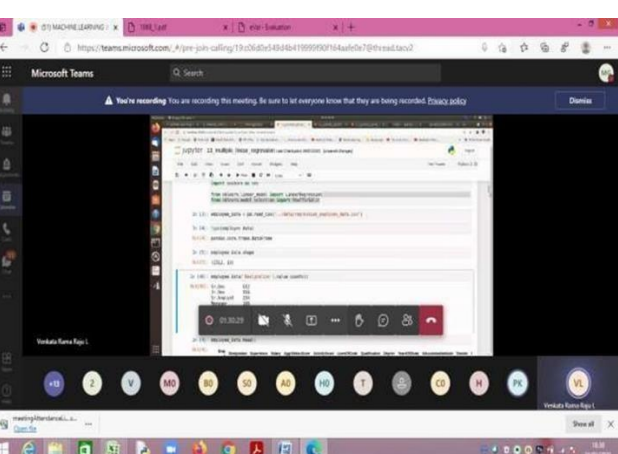
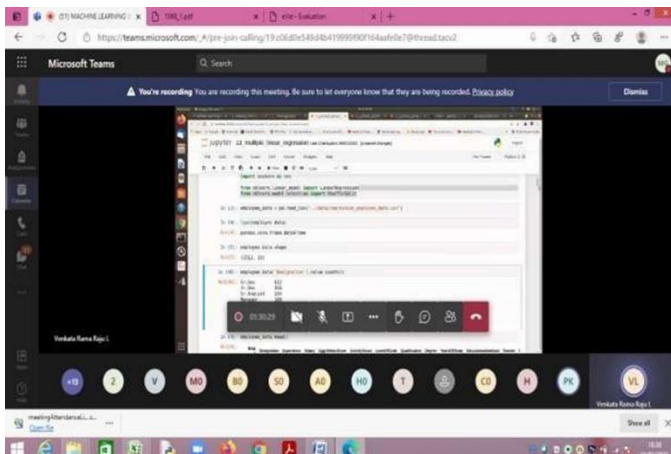
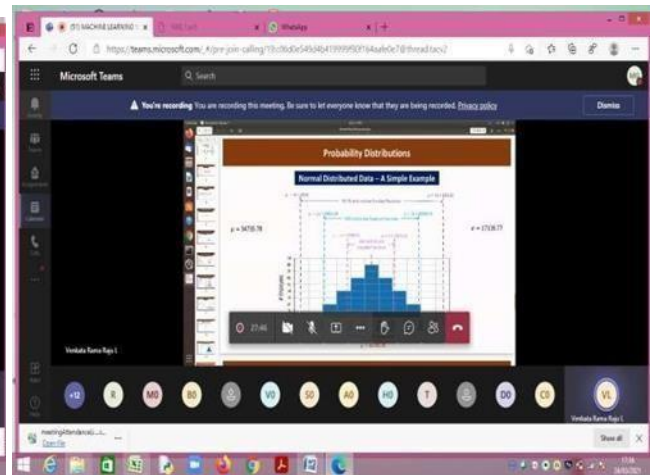
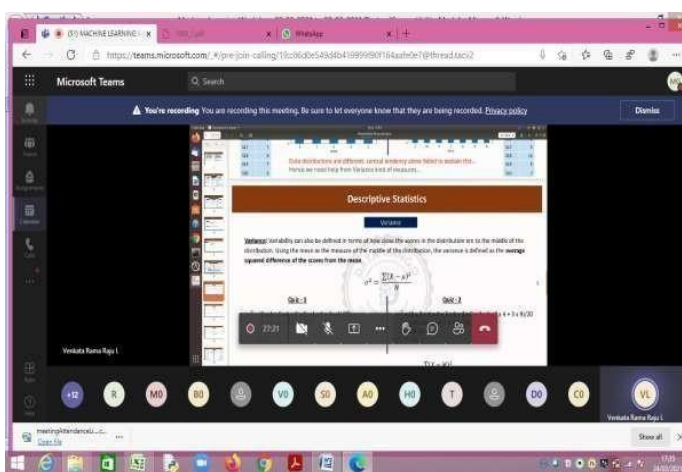




Day 3:

The day-3 began with the Introduction to Arrays where various types of Arrays and Matrices were demonstrated. The topics discussed were:

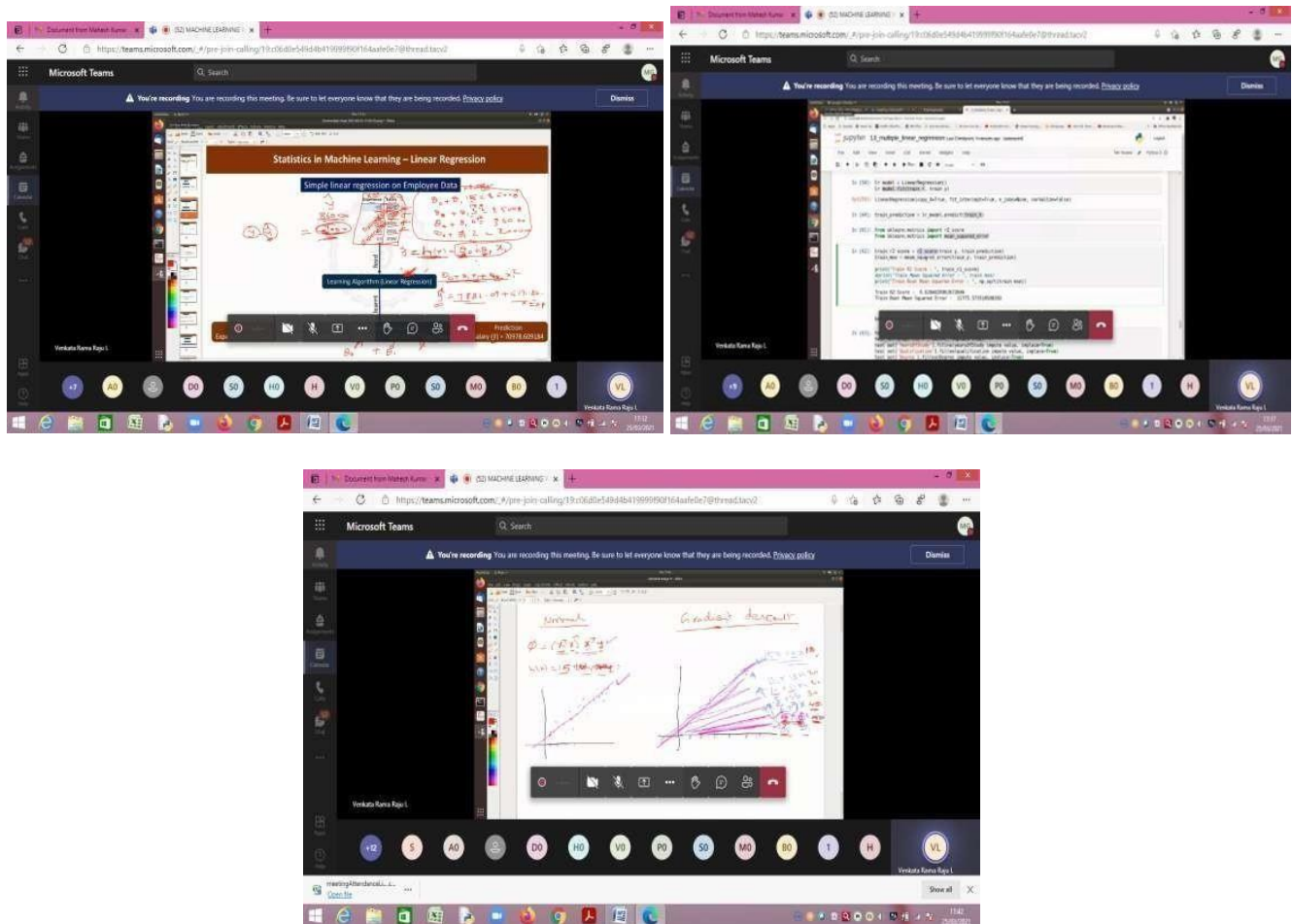
- ☐ 1D Array
- ☐ 2D Array
- ☐ Matrix Operations
- ☐ Pre-defined functions



Day4:

The Day-4 session was on Introduction to Pandas and Cleaning data likeremoving duplicates and clearing data. The topics discussed were:

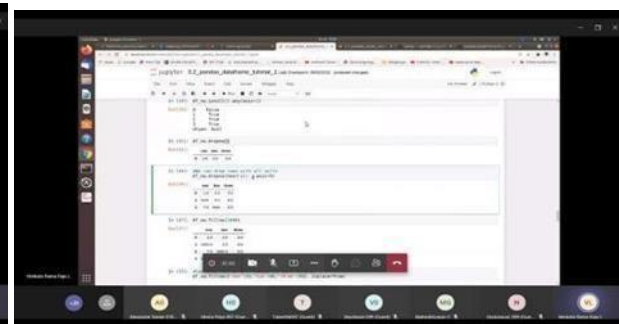
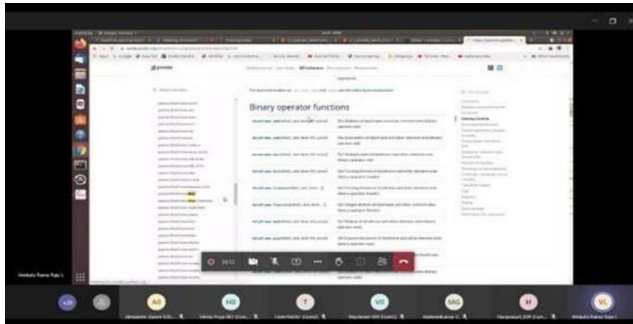
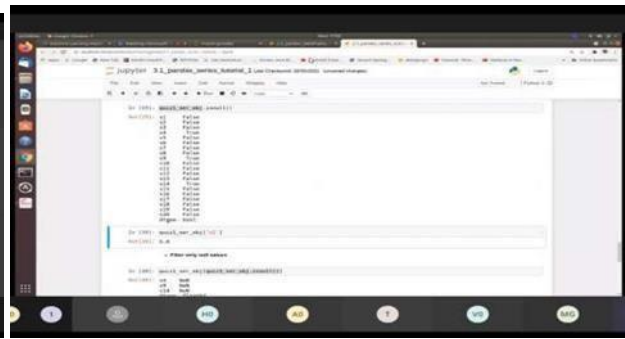
- ☐ Pandas Series
- ☐ Types of Data frames in Pandas
- ☐ Introduction to Statistics
- ☐ Introduction to Exploratory Data Analysis



Day5:

The Day-5 session was on Linear Regression. The topics discussed in the session were:

- ☐ Linear Regression.
- ☐ Types of Calculations performed in Linear Regression.
- ☐ Relu

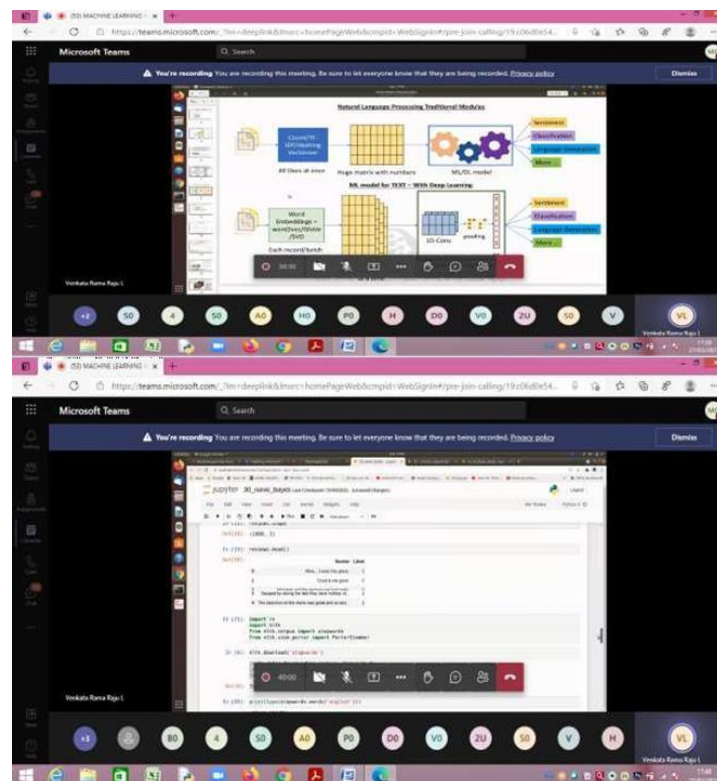


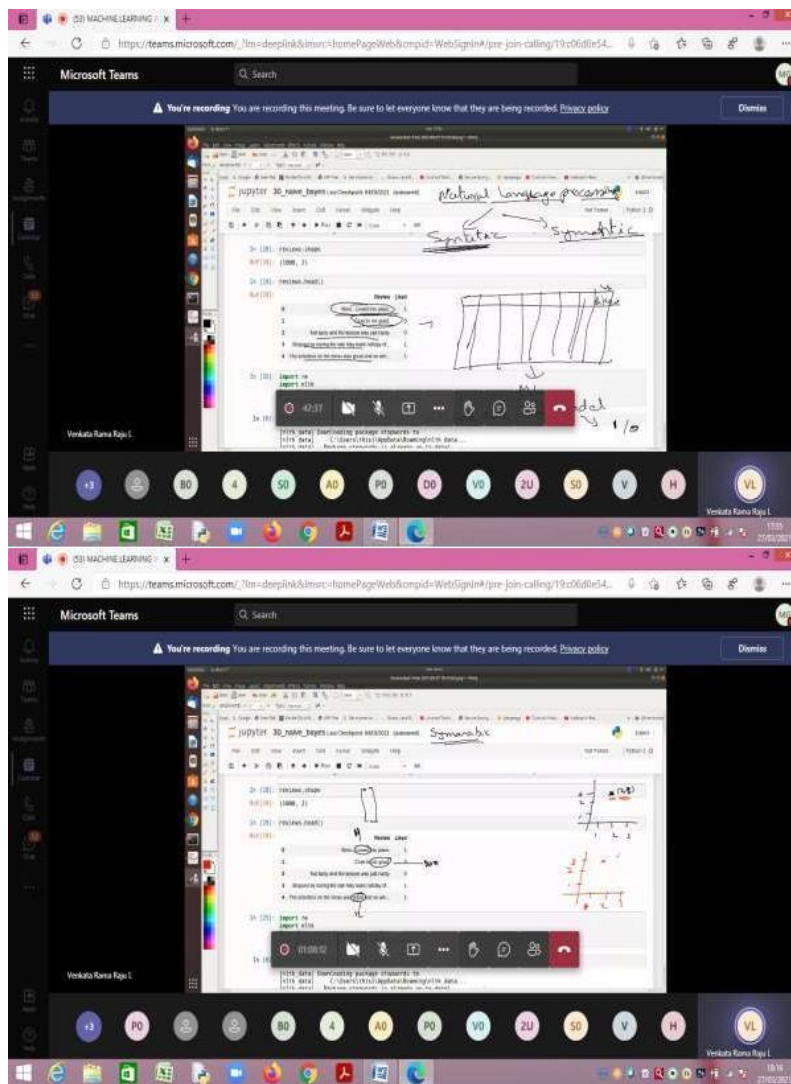
Day 6:

The last day of the session has begun with Introduction to Natural Language Processing (NLP) where various tables, graphs were demonstrated. The topics discussed in the session were:

- ☐ Natural Language Processing (NLP)
- ☐ Types of NLP
- ☐ Normal Equation

Gradient Descent





This workshop was very successful and the students of BCA III Year have gained immense knowledge on Machine Learning using Python.

REPORT ON NSIC WORKSHOP-ANDROID

Bhavan's Vivekananda College had conducted the workshop under DBT -Star Scheme, in partnership with NSIC, hosted an Android Development Workshop for 11 days (March 8th to March 31st, 2021). Ten students attended the workshop from B.Sc final year and second year. Mr.Vishal Kumar Putchala was the mentor .Designation: technical faculty in NSIC.

Timings: 4pm to 5 pm on working day.

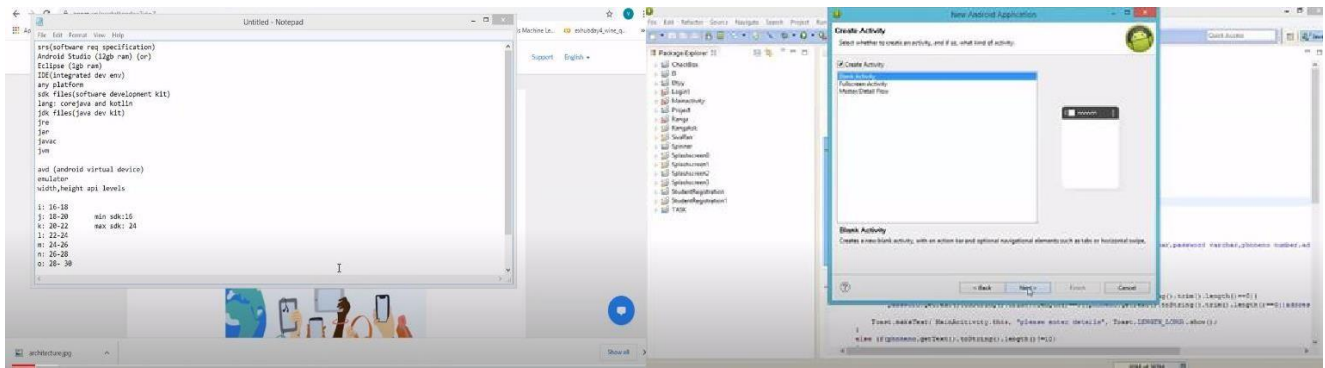
Lecturers attended: Mrs. K.Padmapriya and Mrs.M.Amitha

BSC Students attended : 10 --- 4 Students(BSC-Second years)+ 6 Students(BSC- Third Years).

KADIRI PRATHUSHA
BHAVAGNA LANKA
POKALA SANTHOSH KUMAR
KRISHNA SINGH
PENTA UJWALA
KOTCHARLAKOTA JAYALAKSHMI NAGA MALLESWARI
DAGGUPATI SAI TEJASRI
KOTHA LAKSHMAN KUMAR
VEMULAPATI G SURYA KIRAN SUBBARAYA SARMA
THATIKONDA SREEJA

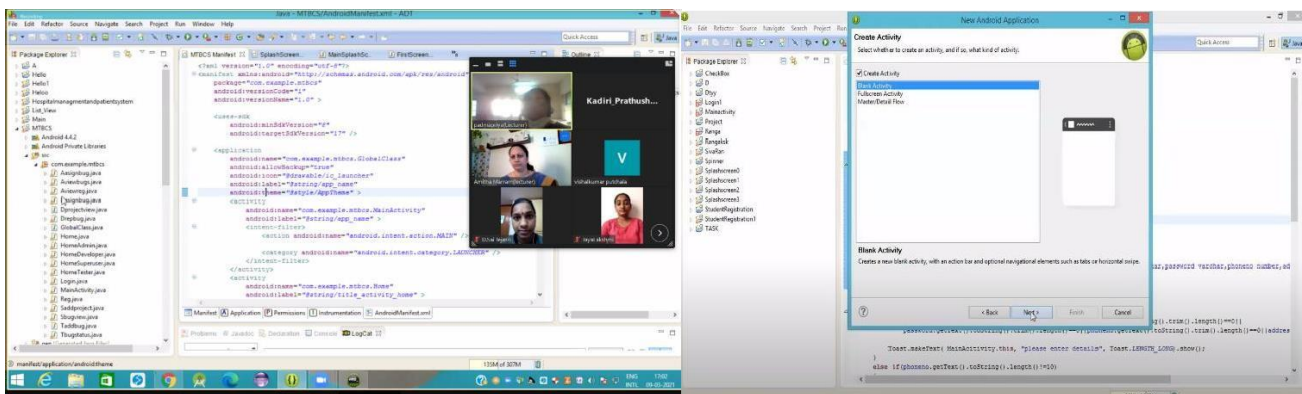
Day1 (8/3/21)

Mr. Vishal has introduced the SRS-software requirement specifications for the development of Android apps. The design of Android, various API levels of Android versions, and various databases used in Android were discussed. He demonstrated us how to make an Android sample project, how to install the Android virtual device, how to build new activities, how to design (.xml), code (.java), and use palette objects (plain text, text field), and how to operate the application (project) in emulator.



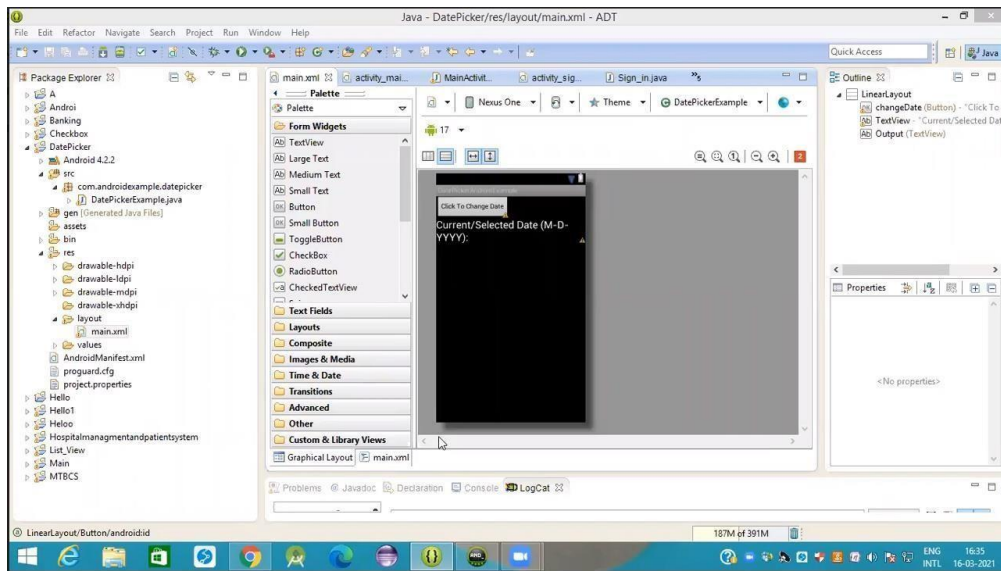
Day2 (9/3/21)

The workshop began with a review of the previous day's topics. Following that, he showed us how to build backgrounds for the activities. Using buttons in the project and changing their colors. Defining the palette objects' variables, assigning actions to the buttons, and connecting the activities to the next activities (Intent). Mr Vishal spoke about splash screen coding, manifest files, and purpose intent filter. He went on to explain a couple of his smaller projects later.



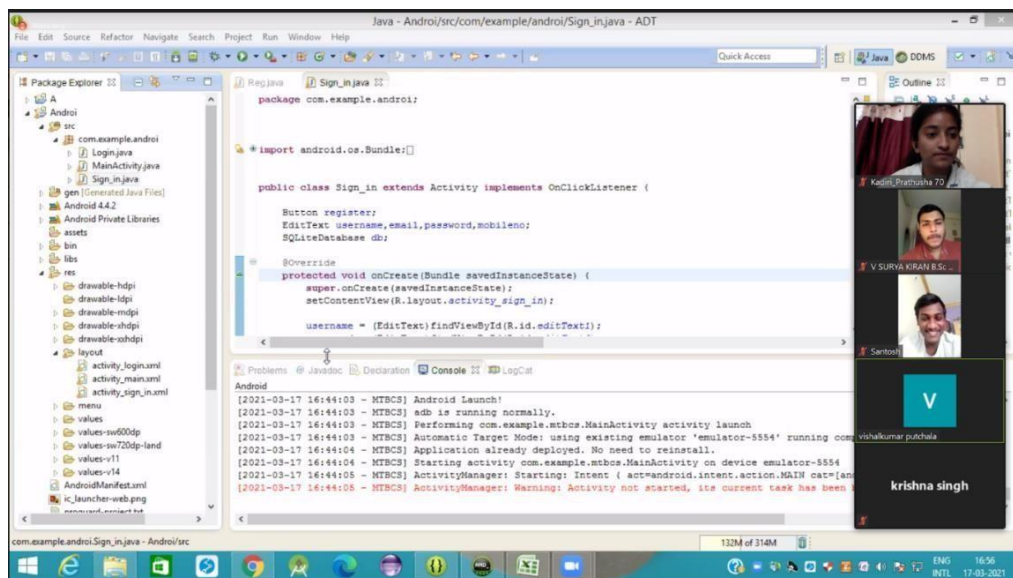
Day3 (16/3/21)

The session began with a review of previous topics and shortcuts. The implementation of login and sign-in pages, as well as the use of text hint in edit text and html color codes, came next. Using a string buffer, he implemented the date picker and checkbox principles. Mr Vishal clarified the idea of a toast message and the various features (modules- admin feature, user feature, restaurant feature) of the Swiggy, Zomato apps.



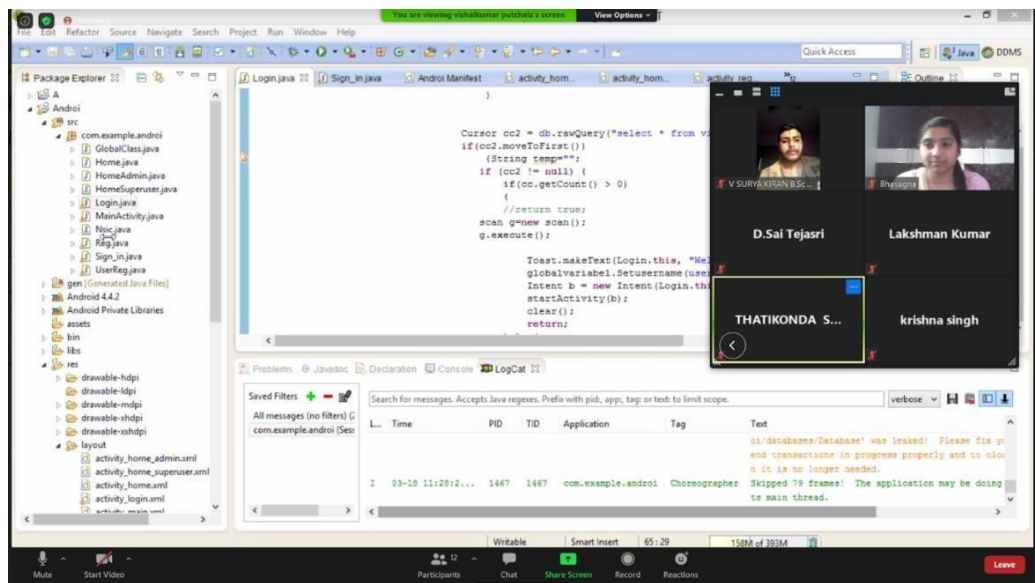
Day4 (17/3/21)

The session began with a description of the database that would be used for the project. How to create a user account on the sign-in page by entering a username, password, email address, and phone number. Creating a database and a table, as well as saving data to the database, using the SQLiteDatabase variable. Mr Vishal then went through the spinner list, the array adapter principle, and how to use it in the sign in page for various modules. Then comes how different tables for different modules can be created on the same page. He then demonstrated the idea of viewing data stored in a database and demonstrated the login page.



Day5 (18/3/21)

The session began with a review of all previously learned concepts. He demonstrated how the sign-in page functions and how a global class was created to validate data stored in the database using the sign-in page.

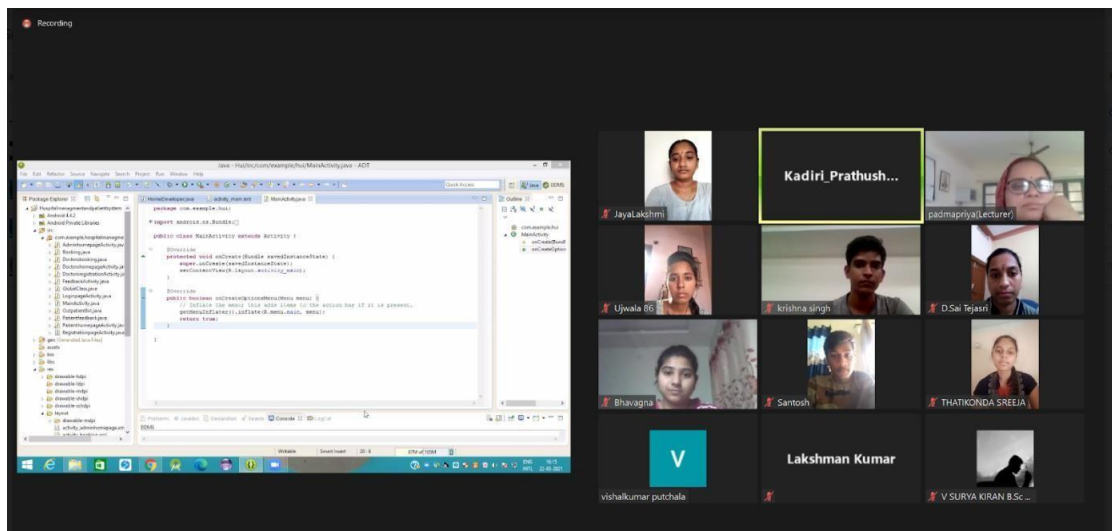


Day6 (19/3/21)

The session started by demonstration on how to use database connectivity to build a profile app (view the logged in user). Through making our own tables, he was able to show the users who signed into the database tables.

Day7 (22/3/21)

Mr Vishal demonstrated how to install the Java ADT in this session (Android development Tools).



Day8 (23/3/21)

The session began with an overview of how to use URL links in the app and create 2D animations for the splash screen. Mr Vishal also taught us how to work with check boxes and data types. He explained SRS (Software Resource Specification), Android API Levels, Javac, JDK, and databases.

Day9 (24/3/21)

Mr Vishal discussed operators (types of operators) during this session. He demonstrated the custom spinner's service. Mr Vishal Spoke about the applications used in hospital management systems as well as the home super user app (how to place bugs, add projects, student profile).

Day10 (25/3/21)

Mr Vishal taught us how to use shared preferences for logging in. He also went over the call logs app and the manifest file in the call log app (how to use permissions).

Day11 (30/3/21)

Mr Vishal taught us how to use Android Studio to introduce Google Maps, which allows us to see our current position on the globe. How to use API key for Google Maps. He also went over the app for the campus selection process and the app for the multi banking transaction scheme. He also went over grid view architecture and how to make an adapter in grid view java.

Overall, the workshop was creative, Knowledgeable, and beneficial to our professional growth. On various platforms, we were able to learn android programming. We are grateful to the college administration for providing us with this opportunity.

Report on

Data Science Workshop

For BCA students from

4-3-2021 to 23-3-2021 (11 days)

The college collaborated with **NSIC** to conduct a workshop on Data Science to 10 of our BCA students. The lecturers participated from the department are **Mrs. KVB Saraswathi**, HOD, Dept. of CS, BVC and **Mr. N. Bhaskar**, Course coordinator, M.Sc(CS) Program, Dept. of CS, BVC. The details of course as follows:

Institution Name : NSIC, Kamala Nagar , Secunderabad.

Duration of Course : 11 Days

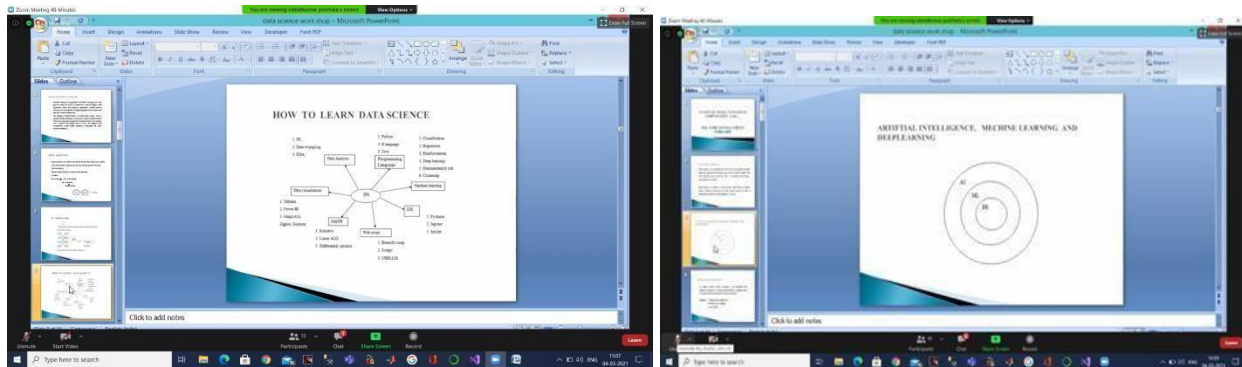
Dates of course : 4-3-2021 to 23-3-2021

Mode of Training: online

Instructor : Mr. Vishal, B.Tech, 5 years experience

The workshop is conducted in online mode with the following concepts covered each day:

4-3-2021 : Introduction to Data Science and its components like AI, Machine Learning, Deep Learning concepts.

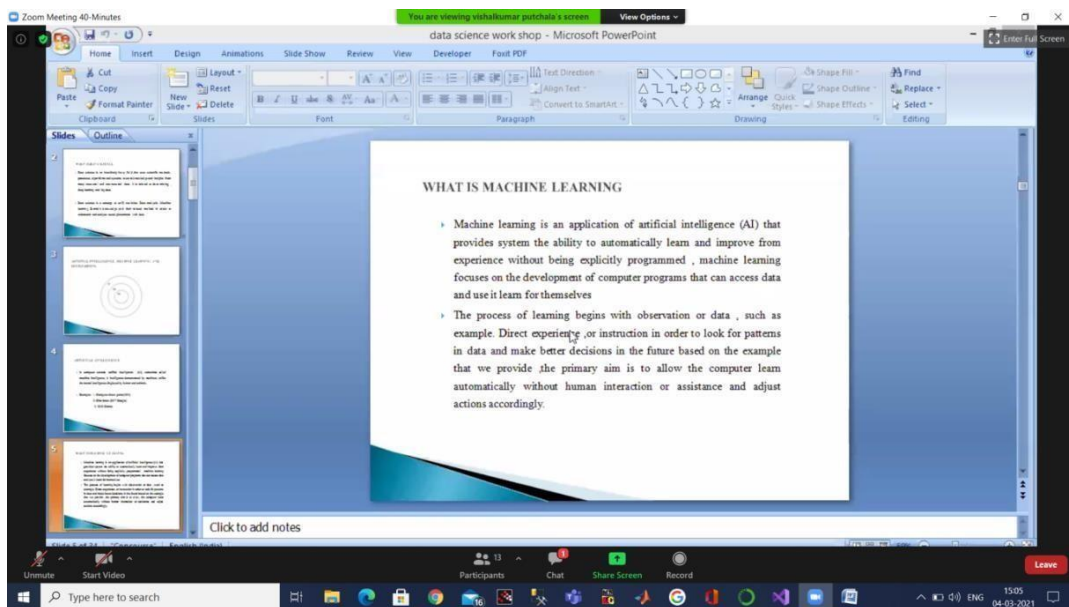


5-3-2021 - Basic concepts of Python and its Software Installation, Real time examples of Python.

8-3-2021 - Strings, Integer and Float – Sample example programs explanation

9-3-2021 - Lists, Tuples and Sets – Sample programs explanation

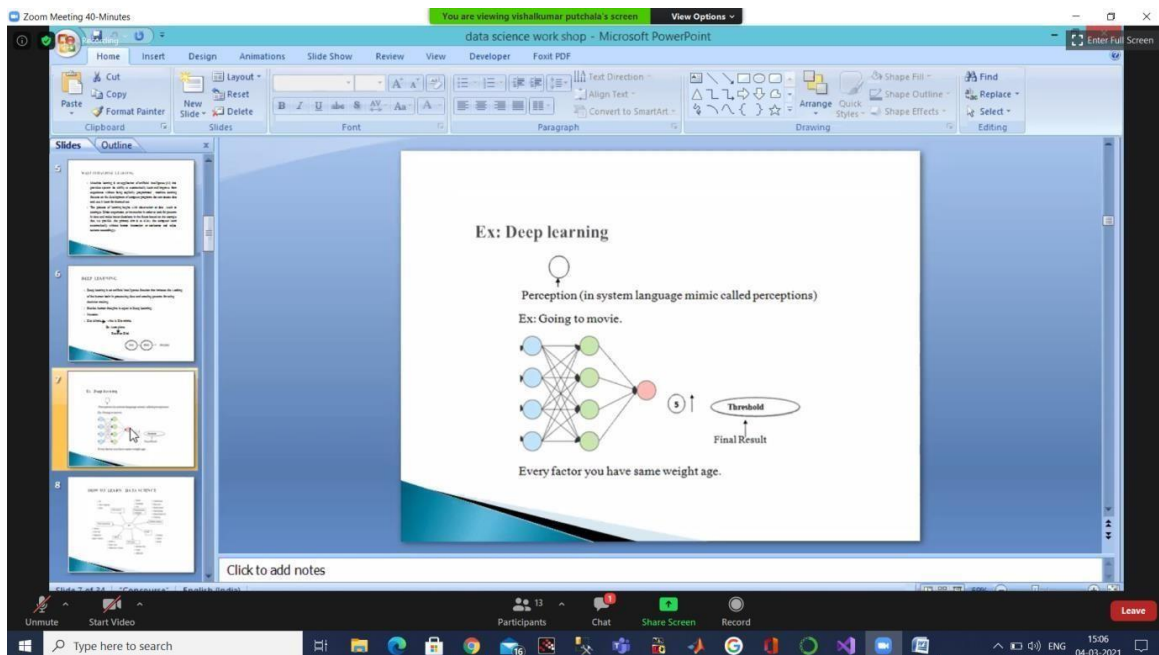
16-3-2021 - Concepts of Dictionaries, Conditionals & Boolean statements with Sample programs explanation.



17-3-2021 - Concept of DJANGO - Explanation with sample programs

18-3-2021 - Supervised Learning, Un-supervised Learning, Reinforcement Learning

19-3-2021 - Concept of ANACONDA, & Its Installation with Example Programs working on it.



22-3-2021 – Installation Jupyter, Notebook, Spyder with working Examples Explanation

EXAMLE OF NAIVE BAYES ALGORITHM

Given tables will help you to calculate the prior and posterior probability.

Frequency table

Weather	Play	Count
Sunny	Yes	2
Sunny	No	3
Overcast	Yes	4
Overcast	No	0
Rainy	Yes	3
Rainy	No	1
Total		13

Likelihood table 1

Weather	Play	Count
Sunny	Yes	2
Sunny	No	3
Overcast	Yes	4
Overcast	No	0
Rainy	Yes	3
Rainy	No	1
Total		13

Likelihood table 2

Weather	Play	Count
Sunny	Yes	2
Sunny	No	3
Overcast	Yes	4
Overcast	No	0
Rainy	Yes	3
Rainy	No	1
Total		13

Likelihood table 3

Weather	Play	Count
Sunny	Yes	2
Sunny	No	3
Overcast	Yes	4
Overcast	No	0
Rainy	Yes	3
Rainy	No	1
Total		13

23-3-2021 – Machine Learning Project explanation in detail with data sets and different sources.

Conti....

Now suppose you want to calculate the probability of playing when the weather is sunny.

Probability OfPlaying:

$P(\text{Yes/sunny}) = \frac{p(\text{sunny/yes}) \cdot p(\text{yes})}{p(\text{sunny})}$

Calculate prior probabilities: $p(\text{sunny}) = 3/14 = 0.37$

$p(\text{yes}) = 9/14 = 0.64$

Calculate posterior probabilities: $p(\text{sunny/yes}) = 3/9 = 0.33$

Put prior and posterior probabilities in formula: $p(\text{yes sunny}) = (0.33 \cdot 0.64) / 0.36 = 0.6$

24-3-2021 - Machine Learning Project with deep learning analysis and connection with reports.

Command Prompt

```
C:\Users\SU21>pip install matplotlib
Requirement already satisfied: matplotlib in c:\users\su21\appdata\local\programs\python\python39\lib\site-packages (from pyntas>0.2.1)
Requirement already satisfied: six>1.5 in c:\users\su21\appdata\local\programs\python\python39\lib\site-packages (from pyntas>0.2.1)
Requirement already satisfied: numpy>=1.15 in c:\users\su21\appdata\local\programs\python\python39\lib\site-packages (from matplotlib)
Requirement already satisfied: python-dateutil>=2.1 in c:\users\su21\appdata\local\programs\python\python39\lib\site-packages (from matplotlib)
Requirement already satisfied: cycler>=0.10 in c:\users\su21\appdata\local\programs\python\python39\lib\site-packages (from matplotlib)
Requirement already satisfied: pyparsing<2.0.4, >=2.1.2, >=2.1.6, >=2.0.3 in c:\users\su21\appdata\local\programs\python\python39\lib\site-packages (from matplotlib)
Requirement already satisfied: six in c:\users\su21\appdata\local\programs\python\python39\lib\site-packages (from cycler)
C:\Users\SU21>
```

graph

id	text	v1	v2	Unnamed: 2	Unnamed: 3	Unnamed: 4
0	ham	Go until jurong point, crazy. Available only	NaN	NaN	NaN	
1	ham	Ok lar... Joking wif u oso...	NaN	NaN	NaN	
2	spam	Free entry in 2 a wkly comp to win FA Cup fina...	NaN	NaN	NaN	
3	ham	U dun say so early hor... U c already then say...	NaN	NaN	NaN	
4	ham	Nah I don't think he goes to usf, he lives aro...	NaN	NaN	NaN	

The students were satisfied with the concepts covered by the instructor and they could able to interact with instructor for doubts clarification. The students have the clear idea different normal application projects and data science projects. The students interacted with instructor for doubts on the topics discussed. It was really interactive workshop.

AI Internship Course under Star- DBT College Scheme

23-April-2021 to 23-May-2021(30 days)

Details Permission Letter

Date: 27/04/2021

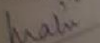
Letter no: DBT-STAR COLLEGE SCHEME/BVC/B/C/CERTIFICATE COURSE


To
Principal
Bhavani's Vivekananda College
Sainikpuri
Secunderabad

Sub: Approval to conduct Certificate course Program online under DBT-STAR COLLEGE SCHEME

Department of Computer Science would like to send B. Sc, BCA II&III Yr students to Pantech Prolabs India Pvt Ltd, Chennai (online mode) for 30 Days Internship /Certificate course on Artificial Intelligence using Python(Including Projects) i.e., from 2nd April 2021 under DBT -Star College Scheme. The details regarding the course are enclosed. We seek your permission and approval for utilisation of the grant (advance payment) under Recurring Head.

Name of the Institute: Pantech Prolabs India Pvt Ltd, Chennai
Registration Fee: Rs 750/- (40 @ Rs 750 =Rs 30,000)
Total Amount including GST: Rs 30,000

Yours Sincerely

(Mrs. KVB Saraswathi Devi)
Head, Department of Computer Science,
BVC.


(Dr. K. Anuradha)
Coordinator,
DBT-Star College Scheme, BVC

9/4/21 27/3

AI INTERNSHIP COURSE SYLLABUS

Objective of Course:

1. To learn Basics of Python
2. To provide knowledge on Artificial Intelligence
3. To Create basic AI application

INTERNSHIP ON ARTIFICIAL INTELLIGENCE

What you will Learn?

DAY – 1 Overview of this course | Introduction to AI | How to create basic AI application (Chat bot using DialogFlow)

DAY – 2 How to install Python & Libraries | Basics of python Programming for AI.
COMPUTER VISION

DAY – 3 Introduction to Computer Vision| How to install computer vision libraries

DAY – 4 Moving Object Detection and tracking using OpenCV

DAY – 5 Face Detection and Tracking using OpenCV

DAY – 6 Object Tracking based on color using OpenCV

DAY – 7 Face Recognition using OpenCV

DAY – 8 Face Emotion recognition using 68-Landmark Predictor OpenCV

DEEP LEARNING

DAY – 9 Introduction to Deep learning | How to install DL libraries

DAY – 10 Designing your First Neural Network

DAY – 11 Object recognition from Pre-trained model

DAY – 12 Image classification using Convolutional Neural Network

DAY – 13 Hand gesture recognition using Deep Learning

DAY – 14 Leaf disease detection using Deep Learning

DAY – 15 Character recognition using Convolutional Neural Network

DAY – 16 Label reading using Optical Character recognition

DAY – 17 Smart Attendance system using Deep Learning

DAY – 18 Vehicle detection using Deep Learning

DAY – 19 License plate recognition using Deep Learning

DAY – 20 Drowsiness detection using Deep Learning

DAY – 21 Road sign recognition using Deep Learning

MACHINE LEARNING

DAY – 22 Introduction to Machine learning| How to install ML libraries

DAY – 23 Evaluating and Deploying the various ML model

DAY – 24 Fake news detection using ML

DAY – 25 AI snake game design using ML

Outcome:

After finishing the course students could able to:

1. Experimented on python programming with basic concepts
2. Analyzed and explored various AI applications.
3. Demonstrated and implemented multiple projected

REPORT ON A INTERNSHIP

23-April-2021 to 23-May-2021(30 days)

Department of Computer Science under DBT-Star College Scheme had conducted an internship i.e., value added course on Python along with Artificial Intelligence and machine learning.

The course was conducted for final year students of BCA and BSc (2018-2021). The internship was held for **30 days** from **23-April-2021 to 23-May-2021**. A total of 40 students were part of this, all the students were provided with a set of pre-recorded videos and tasks daily.

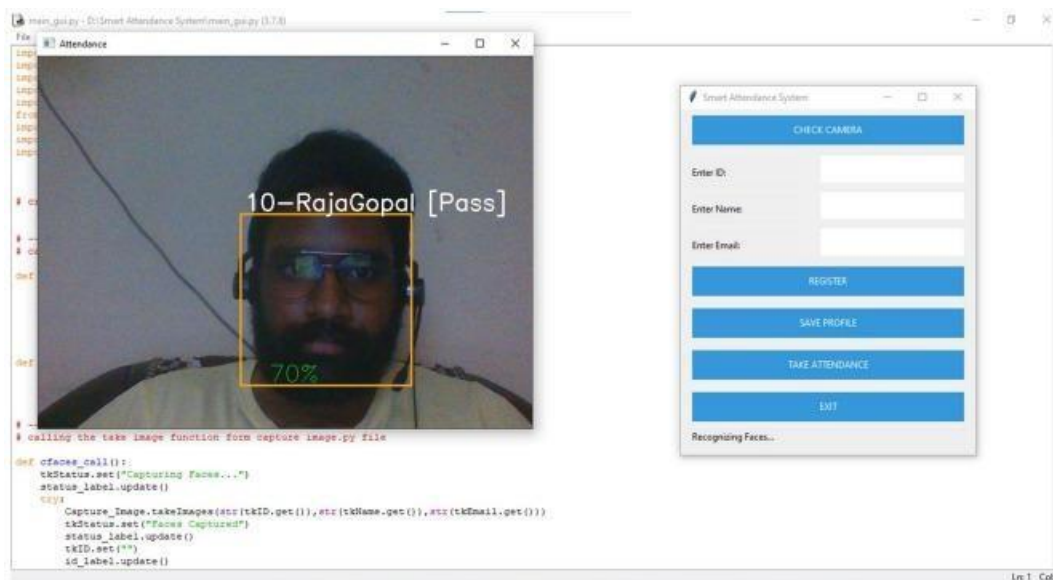
Students learned many new concepts such as.

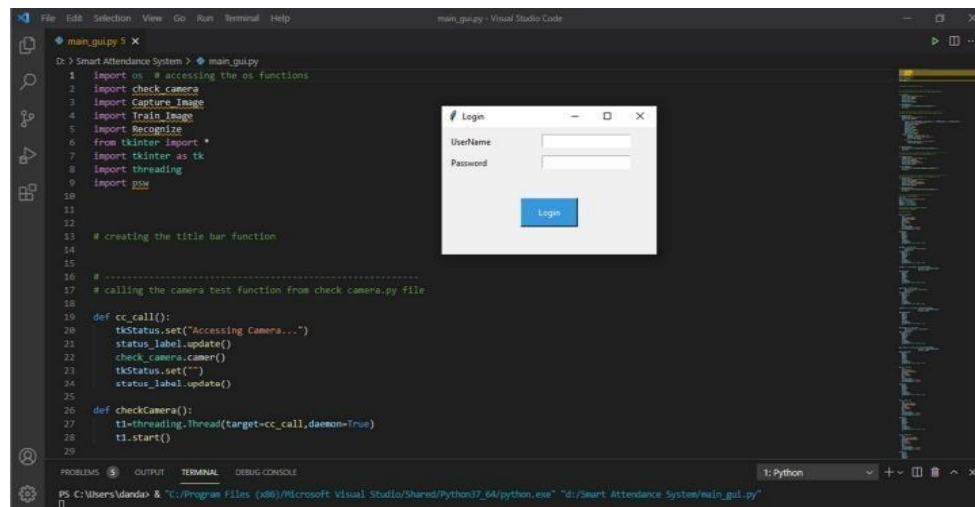
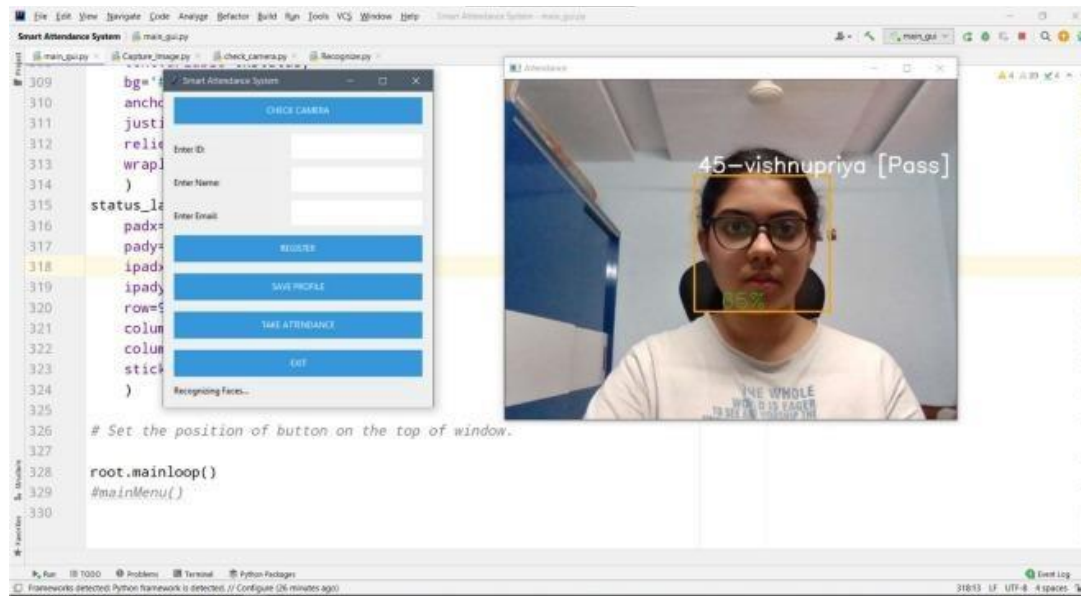
1. Data model training,
2. Image processing
3. Neural networking
4. Face recognition

Students have also done various projects as a part of Internship on:

- 1.Face recognition-based attendance systems
2. Optical character recognition systems
- 3.Motion detection
4. Vehicle detection

Students gave very good feedback about the Internship (value added course). After the completion of this internship, students got their certificate of completion along with enormous knowledge.





Internship Quote



Quotation

Dt: 18-02-2021

Our Ref: PS-929

To

PROF DR BHASKAR N, COORDINATOR,
M.SC(CS) PROGRAM,
BHAVAN'S VIVEKANANDA COLLEGE, SAINIKPURI, SECUNDERABAD.

Sub: Enquiry on 30 Days Course on Artificial Intelligence using Python (LMS) - REG

Dear Sir/Madam,

We introduce ourselves as the manufacturer and dealers of Educational Lab Equipments for Engineering College and Polytechnic College customized products and Technical Training Company.

We aim to deliver the quality, reliable and state of art solutions to ensure customer satisfaction, loyalty and enhancement in our product offerings. Thanks in advance for your valuable order and cooperation. We may assure you of our prompt services. If you have any clarifications, feel free to contact us.

We are providing e-learning software/Animation for our trainer kits.

Looking forward to hear from you.

For Pantech Prolabs India Pvt Ltd,

Malaiyappan.M
Manager
9840974408



PANTECH PROLABS INDIA PVT LTD,
#8 Natarajan Street, Nookampalayam Link Road
cemmancherry, OMR

Chennai - 600 119,
Tamilnadu, India. Ph :
044 – 64524445/6/7

Internet:

Support : support@pantechsolutions.net Sales :
sales@pantechsolutions.net

Hand Phone:

Sales& Support : 91- 98409 74408

Service Centers

Chennai | Madurai | Coimbatore | Tirunelveli | Trichy | Cochin | Hyderabad |

Price Details

S.No	Item Name	Unit Cost	Discounted Price
1	30 Days Training on Artificial Intelligence using Python	999.00Rs	750.00 per User

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PANTECH PROLABS INDIA PVT LTD,

#8 Natarajan Street, Nookampalayam Link Road
cemmancherry, OMR

Chennai - 600 119, Tamilnadu, India.

Ph : 044 – 64524445/6/7

Internet:

Support : support@pantechsolutions.net

Sales : sales@pantechsolutions.net

Hand Phone:

Sales& Support : 91- 98409 74408

NATURAL LANGUAGE PROCESSING

DAY – 26 Introduction to NLP & it's Terminology | How to install NLP Libraries NLTK

DAY – 27 Title Formation from the paragraph design using NLP

DAY – 28 Speech emotion analysis using NLP

DEPLOYING AI IN HARDWARE

DAY – 29 Cloud-based AI, Object recognition using Amazon Web Service (AWS) & Imagga

DAY – 30 Deploying AI application in Raspberry Pi with Neural Compute stick & Nvidia Jetson Nano

What You will Get?

Offline videos ,Online support through forums when you practice Assignments .

What we are teaching is a years of experience on Matlab, You could reduce your research time and learn on 30 days.

All Video access for 60 days

Download all source code

PPTs

Internship e Certificate

Assignments

10+ Projects

Terms and Conditions:

- Certificate : Internship **E-Certificate** for the period of 30 Days
- Payment : 50%Advance balance Before the Certificate Delivery.
- Mentor : 3 Nos Free account will be provided for Faculty with Certificate
- Validity : 90 days from date of quotation.

For Pantech Prolabs India Pvt Ltd,



Malaiyappan.M

Manager

9840974408



List of Participants

B.Sc III Yr List of Students attending Certificate (Internship)Course on Artificial Intelligence using Python			
S.NO	ROLL NO	NAME	CLASS
1	107218468031	Kethu Lavanya	MPCs-3A
2	107218468067	Bude Venkata Sai Harshitha	MPCs-3B
3	107218474012	Gandla Pravallika	MECs-3A
4	107218474031	Lanka Bhavagna	MECs-3A
5	107218468008	Budhera Pranadeep	MPCs-3A
6	107218474011	G.N.Vaishnu Sree	MECs-3A
7	107218474047	Pampari Tejaswi	MECs-3A
8	107218474050	Potlapally PadmaSree	MECs-3B
9	107218474054	R.Deepika	MECs-3B
10	107218474094	Bapatla Sai Vaishnavi	MECs-3B
11	107218474077	Dubagunta Adithya Sai	MECs-3B
12	107218474040	Nalagangula Srija	MECs-3A
13	107218467071	RemmaDevanand Sreehitha	MSCs-3B
14	107218467096	Lasya Kontham	MSCs-3B
15	107218474030	K.Vamshi	MECs-3A
16	107218474017	Jakkula Bhargav Kumar	MECs-3A
17	107218468055	Pokala Santosh Kumar	MPCs-3B
18	107218468038	Krishna Singh	MPCs-3A
19	107219467070	Kadiri Prathusha	MSCs-2B
20	107219467086	Penta Ujwala	MSCs-2B

List of Students attending Certificate (Internship)Course on Artificial Intelligence using Python

BCA III Yr 2021

S.No	Roll Number	Name of the Student
1	107218861047	T Keerthi
2	107218861050	Vyshnavi Bussa
3	107218861028	Sudheendhra Neela
4	107218861038	Hareharan
5	107218861045	VishnuPriya T
6	107218861010	D Rajagopal
7	107218861011	Sai Kiran
8	107218861018	K Rohith Kumar
9	107218861013	G Gowtami
10	107218861020	J Vedapriya
11	107218861017	Jeetank
12	107218861030	Alexander
13	107218861019	Prashanth

14	107218861035	Ricky
15	107218861044	Ajay
16	107218861009	Hariprasad
17	107218861026	Harkrishna
18	107218861014	Prabhava Kruthin
19	107218861049	Vayshnavi Desai
20	107218861002	Anchal