







DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

Report
on
3-days Workshop on
"Python & Data Science"

from 05/08/23 to 07/08/23

Resource Persons

Edureka Learning Centre Team

Davangere

Placement Coordinator

Mr. Suprith P G

Checked by

Dr. Sunil Kumar B S Dean Academics Verified by

Dr. Praveen J

Head of the Department

Checked by

Dr. Praveen J

ICAC-Director
Professor & Head

Dept. of Electronics and Comm. Engg.
GM Institute of Technology
Davangere - 577 006.

Approved by Dr. Sanjay Pande M B Principal

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Davangere - 577 006.





Department of Electronics and Communication Engineering



Invitation

We cordially invite you for the

3-Days Workshop on "Python"

05th to 07st August 2023

Convener:
Dr. Praveen J
IQAC-Director
Professor& Head

Dept. of ECE, GMIT

President:
Dr. Sanjay Pande M B
Principal
GMIT, Davangere

Resource Persons

Edureka Learning Centre Team
Davangere

Mr. Tejasvi Kattimani T R Training & Placement Head Mr. Suprith P G
Placement Co-ordinator

Organized By:

Department of Electronics and Communication Engineering in association with Training and Placement Cell, GMIT, Davangere.

Venue: ISE Lab

Date: 05th August 2023 Time: 9:30 AM



Report of 3-Days hands-on workshop on "Python and Data Science" "If there is no struggle, there is no progress."

The Department of Electronics & Communication Engineering & in association with Placement Department organized "3-Days hands-on Workshop on "Python" during 05/08/2023 to 07/08/2023 for 4th B Section in IS&E Department Laboratory.

Workshop Background Information:

The Department of ECE has always believed in a practical learning-based approach entrenched with ethical values. The department is persistently dedicated to provide a technical knowledge with high employability skills to the students. To fulfill the gap between industry and academia and meet our commitments, the department has planned in a pipe line of programs such as STTPs, Workshops, Webinars, remote hand on sessions in collaboration with Industries.

Today, Python improves digital marketing automation and operations. With its features and ability to process data, Python allows businesses to scale. This makes it an excellent tool for professionals today who look to gain a competitive edge in terms of industry skills.

To explore the power and simplicity of python & data science. This workshop was appreciated by all the students as they were able to add another programming language in their technical skill set. The trainer Mr. Deeraj and the team member of organization, has given the mix of theory and practical knowledge of python & data analytics.

Dr. Praveen J, HOD Department of E&CE, Mr. Tejaswini Kattimani, Placement & Training Department Head, Mr. Suprith P G, Department Placement Co-coordinator and Edureka Learning Centre Team Davangere, inaugurated the workshop by lighting the amp, also motivated the students with his speech and explained that these kinds of workshops are beneficial for their upcoming placements and technical knowledge.

Why was the Python programming language chosen for this workshop?

There were three main reasons.





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First, Python has an easy syntax. You won't waste a lot of time memorizing the arcane syntax that other programming languages will present you. Things like declaring variables, printing operations, and running loops have a very easy and intuitive code.

Second, Python has excellent code readability. Its code is so "English-like" that even a non-programmer might be able to understand what the code's purpose is. Also, it uses indentation to define separate blocks of code. This further enhances its readability and makes the code look cleaner.

Third, Python has tons of useful libraries like NumPy, Pandas, and Matplotlib. It makes things like computation of multidimensional arrays, creating manipulable objects from simple data and creating publication-quality plots and figures very easy without writing separate code for it. This is also the reason why Python has become very popular in the last few years because of its usefulness in AI and ML related fields.

DAY 1: 05/08/2023

simple that python taught students were and Introduction python the languages, programming compared to other language programming following topics were covered.

- 1. What is python?
- 2. Applications of python (web applications, web frameworks, GUI based desktop applications etc.)
- 3. Data types in python with programs.
- 4. Loops & conditions in python with programs.

DAY 2: 06/08/2023

Exception Handling, Multiple Exception Handling, information about Data Science in real life and how python is useful, Sample video based on Data Science which is performed by **Mr. Deeraj** sir.





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- 1. String manipulation.
- 2. Lists in python with program.
- 3. Tuples.
- 4. Dictionaries in python with program.
- 5. Sets in python.
- 6. Range, Functions, Variables in python.
- 7. Modules in python.
- 8. Introduction to data analytics.
- 9. Applications of data analytics.
- 10. Use of data science in real time applications.

DAY 3: 07/08/2023

- 1. Explained how system identifies apple & orange based on texture, shape and weight.
- 2. Explained the mechanism how the Artificial Intelligence is trained by programs.
- 3. Exception handling in python with programs.
- 4. Numpy, Matplotlib, Classifier, Scikit learn.
- 5. GUI pramming in python
 - PYQT, PYGTK, PYGAME, TKINTER, WXPYTHON
- 7. GUI programs on:
 - Configuring widgets, Buttons, Multiple widgets, controlling widget appearance. Use of pack, Grid method, Text box input, Display image.
- 8. Lastly a task was given to students to make a login verification system using GUI program.



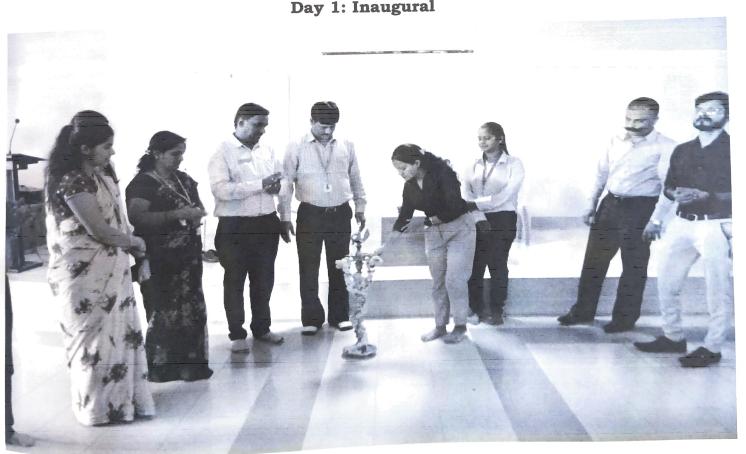




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Day 1: Inaugural



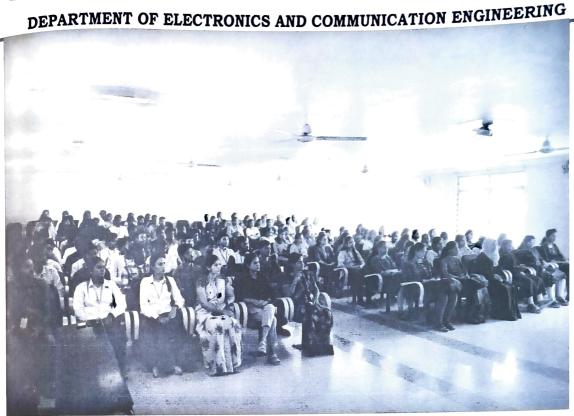
Day1: Lightening the lamp



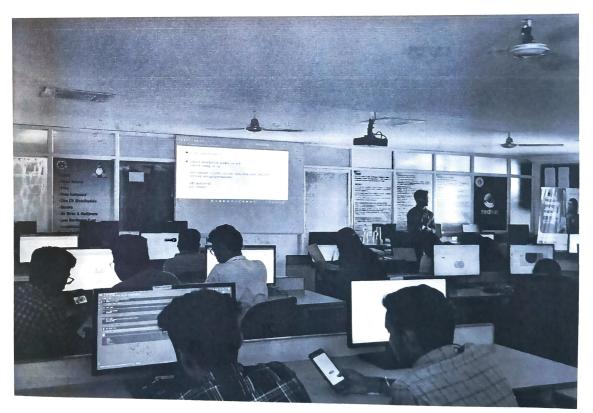
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Day 1: Students along with staffs



Day1: Workshop Started

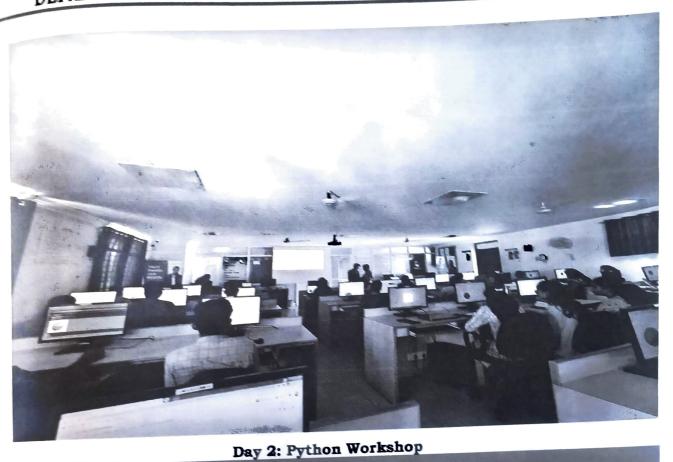


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Day 3: Talk by expert