

**CHHOTUBHAI GOPALBHAI PATEL INSTITUTE OF
TECHNOLOGY Department of Computer Engineering and
Information Technology**

**A REPORT ON
A Five days Short Term Training Programme on
"Research Applications using Python" at CGPIT from 14th to 18th May, 2018**

Organizing Department	Department of Computer Engineering and Information Technology
Chief Patron	Dr. D R Shah
Patron	Dr. N C Shah
Convener	Ms. Purvi Tandel
Coordinators	Ms. Kinjal B. Mistree Mr. Fenil Khatiwala
Organising Committee	Ms. Shraddha Kothiya Ms. Dhara Desai Mr. Parth Shah
Target Audience	Students of M. Tech. CE, M. Tech. IT, MCA, faculty members and research scholars
Total Number of Participants	43
Date of Programme	14 – 18 May, 2018
Invited Speakers	Mr. Parth Joshi Dr. Jayprakash Varma Dr. Priyank Thakkar Mr. Bhaumik Vaidya Mr. Vaibhav Joshi Mr. Kaushal Shah Mr. Parth Shah

SCHEDULE:

Day → Time	Day-1	Day-2	Day-3	Day-4	Day-5
8:30 AM to 9:30 AM	Registration (Day-1) & High Tea				
9:30 AM to 11:00 AM	Introduction to Python Mr. Parth Joshi, Kanssfer Consulting	Python applications in security Mr. Parth Joshi	Deploying research in forms of web services using Python Mr. Parth Shah, CGPIT	Image processing using Python and OpenCV Mr. Bhaumik Vaidya, SCET	Deep learning using Python Mr. Vaibhav Joshi, Ahmedabad University
11:00 AM to 12:30 PM	Programming with Python-I Mr. Parth Joshi	Big Data Analytics using Python Dr. Jaiprakash Verma, Nirma University	Machine Learning using sklearn library in Python Dr. Priyank Thakkar, Nirma University	Natural Language Processing with Python Dr. Brijesh Bhatt, DDU	Deep Learning using Python Mr. Vaibhav Joshi
12:30 PM to 1:30 PM	Lunch Break				
1:30 PM to 3:30 PM	Programming with Python-II Mr. Parth Joshi	Hands - on with Python Pandas Dr. Jaiprakash Verma	Plotting using matplotlib library in Python Dr. Priyank Thakkar	Hands - on with NLTK Dr. Brijesh Bhatt, DDU	Applications of networking using Python Mr. Kaushal Shah, CGPIT

DETAILS OF THE STTP:

The STTP started at BMIIT along with all participants and the head of the department were present to grace the function. Details of the same are as follows:

Day 1 – Session 1, 2 & 3:

Expert of the session: Mr. Parth Joshi.

Mr. Parth Joshi is a Techno Consultant, Trainer and an Entrepreneur. Session is started with basics of Python. It consists of applications of Python for research topics with its functionality.

The second session covered hands-on session with some practical using visual studio code for Python programming like variable declarations, data types primitive data types and practice of exercise given by expert.

Third session consists of local and global declaration of variables, iterators and generators with its uses. Participants have learned functions, pass by value/references with examples.

Day 2 – Session1, 2 & 3:

Expert of the session: Mr. Parth Shah, Techno Consultant, Trainer and an Entrepreneur,
Dr. Jayprakash Varma, Assistant Professor, Nirma University.

The first session is conducted by Mr. Parth Joshi who taught Modules and importing with exercise, participants also learned about packaging, namespace, bifurcation, class, inheritance with demo practical, overriding and overloading concepts.

The second and third sessions are conducted by Dr. Jayprakash Varma who delivered knowledge on Bigdata Analysis using Python. He is delivered concepts of Apache spark that is an Open source big data processing framework built around speed, ease of use and sophisticated analytics.

The third Session is covered Machine learning algorithms using MLib with demo and relate it with real time application. It also shared knowledge about Graphx which is distributed graph processing framework and Data Analytics with Pandas.

Day 3 – Session 1, 2 &3:

Expert of the session: Dr. Priyank Thakkar, Assistant Professor, Nirma University,
Mr. Parth Shah, Assistant Professor, CGPIT.

First Session is conducted by Mr. Parth Shah who has covered integration of Python with web services with hands on session.

The second and third session are conducted by Dr. Priyank Thakkar who shared knowledge of Machine learning concepts in Python like supervised and unsupervised learning,. The expert delivered concepts of scikit-learn using various algorithms like KNN, SVM and K-means. He is covered classification algorithm with code and regression code. The session also covered Sklearn and Matplotlib plotting library for python.

Day 4 – Session 1, 2 & 3:

Expert of the session: Mr. Bhaumik Vaidya, Assistant Professor, SCET, Surat.

Session is started with basics of image processing and explored the knowledge about pattern recognition and some basic applications of image processing using OpenCv. The expert taught video processing with hands-on session, Numpy library, Image ROI extracting and low pass filter for edge detection.

Day 5 – Session 1 &2:

Expert of the session: Mr. VAibhav Joshi, Assistant Professor, Ahmedabad University,
Mr. Kaushal Shah, Assistant Professor, CGPIT.

Mr. Vaibhav Joshi covered the session on Deep learning using Python with various applications.

Mr. Kaushal shah delivered the knowledge of applications of networking using Python with various networking basic terms.

GLIMPS OF STTP:









