

**REPORT**  
on  
**GUJCOST SPONSORED & DST SUPPORTED**  
**STATE LEVEL SEMINAR**

**‘ARTIFICIAL INTELLIGENCE AND**  
**PYTHON PROGRAMMING**



The banner features a central text area with a light blue background and a faint grid pattern. At the top left is the DJMIT logo, and at the top right is the CENT logo. The text reads: 'WELCOME', 'DR. JIVRAJ MEHTA INSTITUTE OF TECHNOLOGY ORGANIZES', 'GUJCOST & DST SPONSORED STATE LEVEL SEMINAR ON', '“ARTIFICIAL INTELLIGENCE & PYTHON PROGRAMMING”', and '21<sup>st</sup> & 22<sup>nd</sup> FEBRUARY 2019'. At the bottom left is the Gujarat Council on Science and Technology logo, at the bottom center is the Gujarat state map with the word 'Gujarat' written in Gujarati, and at the bottom right is the DST logo with the text 'Department of Science & Technology Government of Gujarat'.

**WELCOME**

**DR. JIVRAJ MEHTA INSTITUTE OF TECHNOLOGY**  
**ORGANIZES**  
**GUJCOST & DST SPONSORED STATE LEVEL**  
**SEMINAR ON**  
**“ARTIFICIAL INTELLIGENCE & PYTHON PROGRAMMING”**  
**21<sup>st</sup> & 22<sup>nd</sup> FEBRUARY 2019**

**GUJARAT COUNCIL ON SCIENCE AND TECHNOLOGY**  
GOVERNMENT OF GUJARAT

**જીવરાજ મેહતા ઇન્સ્ટિટ્યુટ ઓફ ટેકનોલોજી**  
**Gujarat**

**Dst**  
Department of Science & Technology  
Government of Gujarat

**ORGANISED BY**  
**COMPUTER ENGINEERING DEPARTMENT**  
**DR. JIVRAJ MEHTA INSTITUTE OF TECHNOLOGY, MOGAR,**

**ANAND**

**Held on**  
**21<sup>ST</sup> and 22<sup>ND</sup> FEBRUARY 2019**

**Seminar Title : ARTIFICIAL INTELLIGENCE AND PYTHON PROGRAMMING**

- Organized By : **Computer Engineering Department**
- Chief Patron : **Shri. Narendra Shrimali**
- Patron : **Dr. Arvindkumar M. Jain**
- Convener : **Prof. Mayur Ajmeri**
- Coordinators : **Prof. Hemang Thakar,  
Prof. Bhupendra Patel, Head, CSE  
Prof. Avdhoot Jejurkar (DJMIT Coord.)**
- Venue : **Kadambari Hall,  
Dr. Jivraj Mehta Institute of Technology.**
- Date : **21<sup>st</sup> and 22<sup>nd</sup> February 2019**

**AIM OF THE SEMINAR**

- To introduce the basic concept of Artificial intelligence and Python Programming
- To bring awareness about intelligence exhibited by machines through interaction with experts of different sessions.
- To help participants to develop understanding about Deep learning and Swarm Intelligence, Machine Learning, Connection of AI and Basics of Python Programming, Overview of OOP Terminology, MySQL-Database Access and Python Classes.
- To give ideas and techniques that can be applied in various fields so as to bring awareness amongst the participants and also to get motivation of doing research based on the seminar topic

**ABOUT THE SEMINAR:**

The two-day seminar focused on Artificial Intelligence by which a machine mimics cognitive functions such as learning and problem solving. Seminar tried to explore ideas in machine learning, Deep learning and Swarm Intelligence. Seminar discussion was also on Python programming which is an interpreted high-level language featuring a dynamic type system and automatic memory management which supports multiple programming paradigms, including imperative, functional-procedural and has a comprehensive standard library. Also there was discussion about Python as a modern language useful for writing compact code specifically for programming in the area of server side web development, data analytics, Artificial intelligence and scientific computing as well as production tools and game development.

## SCHEDULE OF TWO DAY SEMINAR

<b>21<sup>ST</sup> February 2019 [DAY 1 - Thursday]</b>	
09:00 am	Registration
10:00 to 10:30 am	<b>Inaugural Function</b>
10:30 to 11:00 am	Tea & Snacks
11:00 to 12: 30 pm	<b>Expert Session on Deep learning and Swarm Intelligence by Prof. B V Buddhadev</b> , Head, Computer Engineering Department, GEC, Gandhinagar
12: 30 to 01:30 pm	Lunch
1:30 to 3:30pm	<b>Hands on Session on Python (Basics of Python Programming, Data types, Control structures, Exceptions, object, Modules )</b> <b>by Prof. Khushi Patel</b> , Assistant Professor, Computer Engineering Department, Devang Patel Institute Of Advance Technology & Research, Charusat, Changa
03:30 to 04:00 pm	Tea

<b>22<sup>ND</sup> February 2019 [DAY 2 - Friday]</b>	
10:00 am	Tea & Snacks
10:30 to 12: 30 pm	<b>Expert Session on PYTHON (Machine Learning, Connection of AI And Python Programming)</b> <b>by Dr. Udesang Jaliya</b> , Assistant Professor, Computer Engineering Department, Birla Vishvakarma Mahavidyalaya, V.V. Nagar
12: 30 to 01:30 pm	Lunch
1:30 to 3:30pm	<b>Hands on Session on Python (Overview of OOP Terminology, Python Classes, Regular Expressions, MySQL- Database Access)</b> <b>by Prof. Hiren Raval</b> , Assistant Professor, Information Technology Department, Sardar Vallabhbhai Patel Institute of Technology (SVIT), Vasad
3:30 to 4:00pm	Tea
4:00 to 4:30 pm	<b>Valedictory Function</b>

### **REGISTRATION:**

The registration began from 9:00 a.m. onwards. The total of 61 participants registered for the seminar including UG students, PG students and Faculty members as well as free registration. Spot registration was allowed for participants.

All registered participants received the Kit which included the seminar brochure.

### **INAUGURATION FUNCTION:**

The inauguration session began with welcome to all the dignitaries on the dais. Prof. Hemang Thakar of Computer Engineering Department, DJMIT extended a warm welcome to all the dignitaries on the dais and off the dais. Also he extended welcome to all the faculties and participants of Artificial Intelligence and Python Programming Seminar.



**Welcome to the Dignitaries and Lighting of Lamp**

As an auspicious beginning, the lighting of lamp was done by all the dignitaries. A prayer was sung during this occasion. After that dignitaries were offered a floral welcome.



**Speech by Shri. Narendra Shrimali, Chairman, DJMIT and Audience - Inaugural Session**

The dignitaries on dais included Shri Narendra Shrimali, Honourable Chairman of CENT-DJMIT, Shri. Sanjay Shrimali, Director-Finance, DJMIT, Dr. Arvindkumar Jain, Principal, DJMIT, Prof. B V Buddhadev, Expert from Computer Engineering Department , Prof. Mayur Ajmeri, Convener and Prof. Hemang Thakar Coordinator of the Seminar.

Dignitaries on the dais addressed the audience during the Inaugural session sharing their views and opinions.

### **WELCOME SPEECH:**

Dr. Arvindkumar Jain, Principal, DJMIT gave the Welcome Speech. He briefed about the very purpose of organizing the event. He motivated the participants to attend such seminars for the overall benefit and wished all success to the department for conducting seminar.

Shri. Narendra Shrimali, Hon. Chairman, CENT-DJMIT gave inspirational speech to the audience and heartily welcomed all. He appreciated the efforts by organizing department and wished great success. He told the participants to take this as opportunity to get the best of the knowledge during interactions with experts in various sessions during the following two days. He congratulated Principal and the entire team of DJMIT for organizing such event. Dignitaries were presented mementoes as a token and memory of the Seminar from the college.

### **VOTE OF THANKS:**

Vote of thanks for the inaugural function was proposed by Prof. Hemang Thakar, of Computer Engineering Department, DJMIT. Participants were invited for Hi-Tea after the inaugural session.



## DAY -1

### SESSION 1:

### ARTIFICIAL INTELLIGENCE AND PYTHON PROGRAMMING- SWARM INTELLIGENCE BY PROF. B V BUDDHADEV,

**Head, Computer Engg. Dept., Govt. Engineering College, Gandhinagar**

Prof. Bhupendra Patel, Head, Computer Engineering Department, DJMIT introduced the Speaker and gave the speaker a floral welcome. After that he invited the Speaker to conduct the session.



**Introduction of Expert by Head-Comp Dept**



**Session Expert - Prof. B V Buddhadev**



**Participants During the Session**

Prof. B V BUDDHADEV discussed on various topics like AI, need of AI, objectives, Swarm Intelligence, AI in various fields like Healthcare, Transportation, Agriculture, Business, Ant Colony Optimization, Bee Algorithm, and Applications of Swarm Intelligence. Participants came to know the latest know how related to AI during the expert session. After the session, memento was presented to Speaker by Prof. Bhupendra Patel, Head, Computer Department, DJMIT. Participants and guests were then invited for Lunch.

## **SESSION 2:**

### **ARTIFICIAL INTELLIGENCE AND PYTHON PROGRAMMING -BASICS OF PYTHON PROGRAMMING BY PROF. KHUSHI PATEL,**

**Assistant Professor, Computer Engineering Department, DEPSTAR, Changa.**

Prof. Hemang Thakar, Computer Engineering Department, DJMIT introduced the Speaker and gave the speaker a floral welcome. After that he invited the Speaker to conduct the session.

Prof. KHUSHI PATEL emphasized the need of Python Programming. She discussed Data types, Control Structures, Exceptions, Objects, and Modules. She suggested some passive and active Applications of Python also presented interactive Programming session on Python etc. She discussed the concept of Python Programming with various practical examples. At the end of session, question and answer was kept for interaction with participants during which participants took active part to get the brief about Python Programming.



**Session By Prof. Khushi Patel**



**Participants During the Session**

Memento was presented to Speaker by Prof. Bhupendra Patel, Head, Computer Engineering Department, DJMIT at the end of Session.

Participants were offered Hi-tea after the session.

## DAY 2:

### SESSION 3:

#### ARTIFICIAL INTELLIGENCE AND PYTHON PROGRAMMING - MACHINE LEARNING BY DR. UDESANG JALIYA,

**Computer Engineering Department, BVM, Vallabh-Vidyanagar.**

Prof. Vinay Mistry of Computer Engineering Department introduced the Speaker and invited him to conduct the session. Floral welcome was done by Prof. Bhupendra Patel, Computer Engineering Department, DJMIT. After floral welcome, Session speaker started the session with congratulating the team of department for conducting such seminar. He shared his experiences and discussed on various points related to Machine Learning.

Dr. UDESANG JALIYA discussed basics of Machine Learning and relation between Machine Learning and AI. He also discussed importance of machine learning and seven steps of Machine learning. He gave brief introduction about all seven steps of Machine Learning. After that he discussed about supervised learning, unsupervised learning, semi-supervised learning, reinforcement learning.

Memento was presented to Speaker by Prof. Bhupendra Patel, Head, Computer Engineering Department, DJMIT at the end of Session.



**SESSION BY Dr. UDESANG JALIYA**



**PARTICIPANTS DURING THE SESSION**

Participants and guests were then invited for Lunch.



#### **SESSION 4:**

#### **ARTIFICIAL INTELLIGENCE AND PYTHON PROGRAMMING -PYTHON CLASSES, REGULAR EXPRESSIONS, MYSQL-DATABASE ACCESS AND OVERVIEW OF OOP TERMINOLOGY ON PYTHON PROGRAMMING BY PROF. HIREN RAVAL**

**Information Technology Department, SVIT. Vasad.**

Prof Vinay Mistry of Computer Engineering Department introduced the Speaker and invited him to conduct the session.

After the floral welcome by Prof. Bhupendra Patel, Computer Engineering Department, DJMIT, the speaker Prof. HIREN RAVAL discussed about basics of python programming, OOP concept, Class, Object, Data connectivity using MySQL and Regular expression.

He explained how to creating class and also explained all attributes of class. After he discussed constructor, inheritance, multi level inheritance, multiple inheritance with programs. He gave brief knowledge about abstract class and how abstract base classes work. He gave practical knowledge about Database connectivity in MySQL, how to insert table in Database, Insert multiple rows, how to update database, how to delete record in database and how to delete table in database. After database connectivity he discussed regular expression.



**SESSION BY PROF. HIREN RAVAL**



**PARTICIPANTS DURING SESSION**

At the end of session there was question-answer session and then memento was presented to Speaker by Prof. Bhupendra Patel, Head, Computer Engineering Department, DJMIT at the end of Session.

Participants were offered Hi-tea after the session.

#### **VALEDICTORY FUNCTION:**

The session began with inviting dignitaries on the dais. A brief speech was given by Dr. Arvindkumar Jain, Principal, DJMIT who appreciated efforts of the team for successfully conducting the seminar,

After this the certificates were distributed to participants.

The vote of thanks was proposed by Prof. Bhupendra Patel, Head, Computer Engineering Department.



**CERTIFICATE DISTRIBUTION TO THE PARTICIPANTS**

### **CONCLUDING STATEMENT:**

Two-Days Seminar on Artificial Intelligence and Python Programming was conducted successfully by the department. The seminar provided an opportunity for the participants to learn various aspects of Artificial Intelligence and Python Programming and to exchange ideas at the end of each session during question-answer and discussion with the experts.

The event helped in bringing together experts from academia to meet, discuss, and share views and experiences on various topics of Artificial Intelligence and Python Programming with the participants.

### **FEEDBACK:**

- Dignitaries present during Two Day's Seminar highly appreciated the efforts and they liked the topics of the seminar of both days so as to have elaborative sessions on each topic which helped the speakers to cover the required depth of the specific topic for the benefit of the participants.
- Participants were much impressed by the organization of the Seminar and also appreciated the views and knowledge shared by experts and session speakers during various sessions.
- Participants appreciated the ambiance of the campus, institute building, kit, and quality of presentation, schedule and arrangement as well as seminar hall.
- Dignitaries and Participants also appreciated food during the seminar.
- Question-Answer at the end of each session helped to solve the queries of participants and developed an urge to think more in this field. Session experts shared their contact details for further interaction for interested participants.
- Participants were eager for such more sessions.