

# **GUJARAT COUNCIL ON SCIENCE & TECHNOLOGY**

## **Dept of Science and Technology**

### **Govt of Gujarat Programme Report**

- 1. Title of the Programme:** STTP on “ Concept of Artificial Intelligence and Machine Learning towards Research Applications”
- 2. Category:** (Seminar/Symposium/Workshop/STTP/Conference/etc.) STTP
- 3. Date/s and Duration:** 16/01/2023 to 20/01/2023 (5 Days)
- 4. Venue:** Computer Engineering Department, L. D. College of Engineering, Ahmedabad
- 5. Dignitary/s present at Inaugural Function:**

**Name:** Prof. (Dr.) R. K. Gajjar

**Designation:** Principal

**Name of institute:** L. D. College of Engineering, Ahmedabad

**Contact No:** 079 2630 2887

**Name:** Prof. (Dr.) C. S. Thaker

**Designation:** Head of Computer Engineering Department

**Name of institute:** L. D. College of Engineering, Ahmedabad

**Contact No:** 91 9898835789

**Name:** Prof. (Dr.) Ketan Badgular

**Designation:** Head of Electrical Engineering Department

**Name of institute:** L. D. College of Engineering, Ahmedabad

**Contact No:** 91 8153941900

**Name:** Shri Prerak Shah

**Designation:** Jt. CEO

**Name of institute:** DEV IT Limited

**Name:** Shri Prashant Halari

**Designation:** Co-Founder & CEO

**Name of institute:** Synoverge Technologies

## 6. Invited speaker/ Expert:

Sr. No.	Name	Designation	Department & Organization	Topic of Lecture
1	Dr. Amit Ganatara	Provost	Parul University, Vadodara	Deep Learning Concepts and Applications
2	Dr. Chirag Patel	Associate Professor	Information Technology Department, VGEC, Chandkheda	Neural Network and Back-propagation
3	Dr. Hitesh. R. Chhinkaniwala	Associate Professor	Computer Engineering, Adani Institute of Infrastructure Engineering, Ahmedabad	Early Detection Health Care Disease using Machine Learning
4	Dr. Hiren Patel	Principal	Vidush Somany Institute of Technology and Research	Blockchain Technology and It's Application
5	Dr. Chirag S. Thaker	Professor and Head of the Department	Computer Engineering, L. D. College of Engineering, Ahmedabad	Basic Concepts of Artificial Intelligence and Machine Learning for Researchers
6	Dr. Priyank Thakkar	Associate Professor	Computer Science & Engineering, Nirma University, Ahmedabad	Auto Encoders in Machine Learning
7	Dr. Vatsal Shah	Assistant Professor	Information Technology Department, BVM, VV Nagar	Knowledge Representation Vs Ontology
8	Dr. Mehul Raval	Professor	Ahmedabad University, Ahmedabad	Deep Learning Approaches for Atmospheric Corrections
9	Dr. Sanjay M. Shah	Professor and Head of the Department	Computer Engineering, GEC, Rajkot	Application of Artificial Intelligence in Software Engineering
10	Dr. Dhara Bhuch	Assistant Professor	Computer Engineering, L.D. College of Engineering, Ahmedabad	Machine Learning Approaches for Side Channel Attacks
11	Prof. Maitrik Shah	Assistant Professor	Computer Engineering, L.D. College of Engineering, Ahmedabad	Understanding and Interpreting Deep Learning Models
12	Mr. Prashant Halari	Co-Founder and CEO	Synoverge Technologies, Ahmedabad	Application of Artificial Intelligence in different domain in Industry
13	Mr. Vivek Shah	VP, International Business	Dev Information Technology Limited	Application of Machine Learning in different domain in Industry

**7. Total no. of participants (provide full list with name, address, institutions and contact numbers): 34**

<b>Sr. No</b>	<b>Participant's Name</b>	<b>Name of Institute</b>	<b>City of Institute</b>	<b>Email Address</b>
1	Krunal Kanubhai Prajapati	R C Technical Institute	Gujarat	kkprajapati.it@gmail.com
2	Nareshkumar Sosa	Government Polytechnic, Gandhinagar	Gujarat	ndsosa.gp@gmail.com
3	Namrata Setu Shroff	Government Engineering college Gandhinagar	Gujarat	namrata@gecg28.ac.in
4	Hitesh Dayashankar Rajput	L. D. College of Engineering, Ahmedabad	Gujarat	hitesh.rajput@ldce.ac.in
5	Vipul Harshadray Punasanwala	Government Polytechnic Gandhinagar	Gujarat	vhpunasanwala@yahoo.com
6	Shashikant Rameshbhai Sarvaiya	R C TECHNICAL INSTITUTE	Gujarat	shashikant.sarvaiya@gmail.com
7	Kuntesh K Jani	L D College of Engineering	Gujarat	Kuntesh.jani@ldce.ac.in
8	Harshadkumar S Modi	Government Polytechnic Gandhinagar	Gujarat	harshadsmodi@gmail.com
9	Adesh Vishnuprasad Panchal	Government engineering college patan	Gujarat	adesh.mtechce@gmail.com
10	Jay Sureshchandra Raval	R C TECHNICAL INSTITUTE	Gujarat	jay.raval7192@gmail.com
11	Shital Amrutlal Solanki	L.D.college of engineering	Gujarat	shital@ldce.ac.in
12	Manisha Chaudhari	Government Polytechnic Gandhinagar	Gujarat	manisha224@gmail.com
13	Prof. (Dr.) Hetal Anilkumar Joshiara	L. D. College of Engineering	Gujarat	hetaljoshiyara@ldce.ac.in
14	Tushar Ashokkumar Champaneria	Government Engineering College, Modasa	Gujarat	tachampaneria@gecmodasa.org
15	Shraddha Rameshbhai Modi	L.D.College of Engineering, Ahmedabad	Gujarat	shraddhamodi@ldce.ac.in
16	Rajesh T. Jambukia	Government Polytechnic, Ahmedabad	Gujarat	jambukia.rajesh.gp@gmail.com
17	Rushal Gautambhai Chauhan	Information Technology Department, Government Polytechnic,Ahmedabad	Gujarat	chauhanrushal@gmail.com
18	Janki Tejas Patel	SAL Engineering and Technical Institute	Gujarat	Janki.patel@sal.edu.in
19	Bakul B. Panchal	L. D. College of Engineering	Gujarat	bakul@ldce.ac.in
20	Monali Prajapati	GP Gandhingar	Gujarat	Monalimandli79@gmail.com
21	Parvez K. Faruki	A.V. Parekh Technical Institute Rajkot	Gujarat	parvezfaruki.kg@gmail.com
22	Bhoomika K Sharma	Government Polytechnic, Ahmedabad	Gujarat	sharma.bhoomika02@gmail.com
23	Barkha Bhavsar	LDRP ITR, Gandhinagar	Gujarat	barkha_ce@ldrp.ac.in
24	Patel Sudhaben Kunalkumar	Sal institute of technology and engineering research	Gujarat	sudha.patel@sal.edu.in
25	Prof. Harshad L Chaudhary	Government Engineering	Gujarat	harshad.harvi@gmail.com

		College Patan		
26	Prof. (Dr.) Mehul C. Parikh	L.D. College of Engineering	Gujarat	mehulparikh@ldce.ac.in
27	Thummar Kamlesh D	Government polytechnic Ahmedabad	Gujarat	kdthummar@gpahmedabad. ac.in
28	Kalpesh M Patel	L D COLLEGE OF ENGINEERING	Gujarat	kmpatel@ldce.ac.in
29	Gadhavi Devika Bhagavatsang	R C Technical Institute,Sola/GTU	Gujarat	dbgrcti@gmail.com
30	Sheenam Parveen Garg	Government Polytechnic, Ahmedabad	Gujarat	sheenam.it@gmail.com
31	Harishchandrasinh Jhala	Government polytechnic Gandhinagar	Gujarat	harish.polytech@gmail.com
32	Maitrik Shah	L D College of Engineering	Gujarat	maitrikshah.ce@gmail.com
33	Prajapati Payal J	L. D. College of Engineering	Gujarat	payal.prajapati@ldce.ac.in
34	Rutul Chandulal Patel.	Government Polytechnic Gandhinagar.	Gujarat	rutulpateler@gmail.com.

## 8. Program summary (200 words).

Short Term Training Program (STTP) on “Concept of Artificial Intelligence and Machine Learning towards Research Applications” was organized by the Computer Engineering Department, L. D. College of Engineering, Ahmedabad during 16th January 2023 to 20th January 2023, which was sponsored by Gujarat Council Of Science and Technology (GUJCOST), DST, Govt. of Gujarat and approved by Directorate of Technical Education (DTE), Govt. of Gujarat.

The Chief Guest of the Inauguration Ceremony of the STTP was Prof. (Dr.) R. K. Gajjar, Principal at L. D. College of Engineering, Ahmedabad. Prof. (Dr.) Ketan Badgujar, Head of Electrical Engineering Department, Shri Prerak Shah, Jt. CEO at DEV IT Limited and Shri Peashant Halani, Co-founder & CEO, Synoverge Technologies were present in the inauguration ceremony as the Guest of Honor. STTP had Knowledge Partner, Pearson Publication, who will provide the book on “Machine Learning” to every participant. Mr. Gaurav Gangeshi, from Pearson Publication was also present in the Inauguration Ceremony. DEV IT Limited and Synoverge Technologies were the technology partners for the STTP.

Faculties from various engineering institutes across the state participated in the STTP. They gave valuable feedback regarding the STTP that, “The STTP was very well structured and a proper flow was maintained starting with the introduction to the Artificial Intelligence and Machine Learning and its application. Moreover, it was really inspiring to listen to many accomplished and experienced experts who shared the plethora of knowledge. The inclusion of the experts from the industry was really a cherry on the cake.”

## Technical brochure / leaflet



### Short Term Training Programme on Concept of Artificial Intelligence and Machine Learning towards Research Applications

16<sup>th</sup> January 2023 to 20<sup>th</sup> January 2023

In association with  
DST - GUJCOST



Department of Computer Engineering  
L. D. College of Engineering  
Ahmedabad

Principal  
Prof. (Dr.) Rajul K. Gajjar

Head of the Department  
Prof.(Dr.) Chirag S. Thaker  
Professor, Computer Engineering



#### L. D. College of Engineering Ahmedabad

L. D. College of Engineering, one of the oldest in the western region, has entered its 75<sup>th</sup> year in June 2022 which attracts highest merit students. Our institute witnesses a tide of innovative ideas, many of them granted patents and high end research publications. It has been ranked "Third" under the category "Colleges/Institutes (Govt. & Govt. Aided) (Technical)" in Atal Ranking of Institutions on Innovation Achievement (ARIIA) 2021, by the Ministry of Education, Government of India.

L. D. College of Engineering, Ahmadabad is AICTE approved premier engineering college in Gujarat. The institute is affiliated to GTU and administrated by Department of Technical education, Gujarat State.

#### Department of Computer Engineering

Computer Engineering Department works with the vision of achieving excellence for providing value-based education in Computer Engineering through innovation, team work and ethical practices. Computer engineering at the L. D. college of engineering runs majorly three-degree programs; the bachelor of engineering in Computer Engineering, a newly introduced Bachelor of Engineering in Artificial Intelligence and Machine Learning, and master's in Computer Engineering which comprises 200 aspirants each year. The department is distinguished by a team of passionate academic staff with a wide range of research interests.

#### Course Highlights

- Basic Concepts of Artificial Intelligence and Machine Learning for Researchers3
- Deep Learning Approaches for Atmospheric Corrections
- Software Engineering
- TensorFlow : A Platform to build ML/DL Model
- Neural Network and Back-propagation
- Knowledge Representation Vs Ontology
- Auto Encoders in Machine Learning
- Channel Attacks
- Natural Language Processing for Machine Learning
- Early Detection Health Care Disease using Machine Learning
- Smart Health in the Era of Artificial Intelligence

#### General Instructions/Information for Participants:

- The faculty members of the AICTE approved institutions, research scholars, PG Scholars, participants from Government, Industry (Industry etc.) can participate in this workshop.
- STTP is **FREE** for all participants
- STTP shall be conducted in Offline mode.

Registration Form	Note	List of Experts
<p>1. Name of Faculty :- _____</p> <p>2. E-Mail ID:- _____</p> <p>3. Contact No:- _____</p> <p>4. Name of Institute:- _____</p> <p>5. Experience in Years :- _____</p> <p>6. Designation:- _____</p> <p>The information provided above is true to the best of my knowledge. If selected, I agree to be abided by the rules and regulation of the workshop and shall attend the said workshop for the entire duration.</p> <p>Date: _____</p> <p>Place: _____ Signature of Participant</p> <p style="text-align: center;"><b>Sponsorship Certificate</b></p> <p>Prof./Dr. Mr./Ms. _____</p> <p>is an employee of our institute and is hereby sponsored to participate in STTP conducted by LDCE-Ahmedabad.</p> <p>Signature &amp; Seal of Head of Institution _____</p>	<ul style="list-style-type: none"> <li>• "NO" Registration fee is charged to attend the program.</li> <li>• Entire program is to be conducted Offline at Computer Engineering Department, LDCE, Ahmedabad.</li> <li>• It is mandatory to attend all sessions; failing to do so may result into non-issuance of certificate.</li> </ul> <p style="text-align: center;"><b>Registration</b></p> <ul style="list-style-type: none"> <li>• Please fill in the Google – Form <a href="https://bit.ly/sttp_reg">https://bit.ly/sttp_reg</a></li> <li>• Selected candidates will be informed through E-Mail for details.</li> </ul> <p style="text-align: center;"><b>Program Coordinators</b></p> <p><b>Dr. Nikunj Domadiya, Assistant Professor</b>  <b>Contact No: 9913463921</b>  <b>Email: nikunjdomadiya.ce@ldce.ac.in</b></p> <p><b>Prof. Archana Gondalia, Assistant Professor</b>  <b>Contact No: 7405722259</b>  <b>Email: archana.gondalia@ldce.ac.in</b></p>	<ul style="list-style-type: none"> <li>• Prof. (Dr.) Amit Ganatara, Provost, Parul University, Vadodara</li> <li>• Prof. (Dr.) Sanjay Shah, Professor and Head of Department Computer Engineering, GEC, Rajkot</li> <li>• Prof. (Dr.) Hiren Patel, Principal, Vidush Somany Institute of Technology and Research.</li> <li>• Dr. Mehul Raval, Professor, Ahmedabad University, Ahmedabad</li> <li>• Prof. (Dr.) Chirag Thaker, Professor and Head of Department, Computer Engineering, LDCE, Ahmedabad</li> <li>• Dr. Priyank Thakkar, Associate Professor, Computer Science &amp; Engineering, Nirma University, Ahmedabad</li> <li>• Dr. Hitesh Chhinkaniwala, Associate Professor, Computer Engineering, AIE, Ahmedabad</li> <li>• Dr. Chirag Patel, Associate Professor, Information Technology Department, VGEC, Chandkheda</li> <li>• Dr. Vatsal Shah, Assistant Professor, Information Technology Department, BVM, VV Nagar</li> <li>• Dr. Dhara Buch, Assistant Professor, Computer Engineering, LDCE, Ahmedabad</li> <li>• Prof. Maitrik Shah, Assistant Professor, Computer Engineering, LDCE, Ahmedabad</li> <li>• Mr. Prashant Halari, Synoverge Technologies, Ahmedabad</li> <li>• Mr. Vivek Shah, Dev Information Technology Limited, Ahmedabad</li> </ul>

9. **Final Statement of Income and Expenditure:** Attached as a separate document.
10. **Utilization Certificate with signature and Seal of the Head of the institute :** Attached as a separate document.
11. **Copy of vouchers duly signed by the coordinator :** Attached as a separate documents.

## 12. Photograph



As per Indian Tradition, Inaugural Function started with prayer offered to Goddess Saraswati followed by Lamp Lighting By Chief Guest, Guest of Honor and all the Dignitaries on the dais.



During the Inaugural Function, Chief Guest, Guest of Honor and Dignitaries on the dais deliver speech which were very motivating, inspiring and full of knowledge that motivated every participant of the STTP with great enthusiasm.



Prof. (Dr.) Chirag S. Thaker, Head of Computer Department, L. D. College of Engineering, Ahmedabad has conducted an Expert Lecture on “Basic Concepts of Artificial Intelligence and Machine Learning for Researchers” on 16<sup>th</sup> Jan 2023.



Dr. Hitesh Chhinkaniwala, Associate Professor at Adani Institute of Infrastructure Engineering, Ahmedabad is delivering An Expert Lecture on “ Early Detection Health Care Disease Using Machine Learning” on 17<sup>th</sup> Jan 2023.





DEV IT Limited and Synoverge Technologies were technology partners in the STTP. Both the Technology Partner Conducted an Expert Lecture During STTP. In the above picture, Lecture is conducted By Experts from Synoverge Technologies and Dev Information Technology Ltd.



Prof. (Dr.) Jyoti Pareek, Head of Computer Science Department, Gujarat University was Chief Guest in Valedictory Ceremony which was held on 20<sup>th</sup> Jan 2023. Dr. Dipesh Makwana, Associate Professor, IC Department, LDCE-Ahmedabad, Prof. P I Bhatt, Retired Associate Professor, Applied Mechanics Department & Independent Consultant, GEC Rajkot & Prof. (Dr.) Rajesh Jain, Head of Civil Department, LDCE-Ahmedabad were Guest of Honor. Chief Guest, Guest of Honor and Prof. (Dr.) Chirag Thaker, Head of Computer Engineering Department, LDCE-Ahmedabad gave motivational speech to all the participants of STTP which inspires them to continue doing research in AI & ML with full Zeal and Zest. Prof. Archana Gondalia gave a vote of Thanks. At last, a photo was taken of all the participants with all the Guests, Head of Computer Department and Coordinators of the STTP.

**Thank You**