

DISTINGUISHED EXPERTS

- **Dr. Reema Thareja**, Assistant Professor, University of Delhi
- **Dr. R. Prasanna Kumar**, Associate Professor, School of Computing, Chennai, Tamil Nadu
- **Mr. Sneh Shahani**, Lead Data Scientist, Pune, Maharashtra
- **Dr. Mayank Singh**, Assistant Professor, IIT Gandhinagar
- **Dr. Surajit Debnath**, Vice President, IIC, Tripura University, Tripura
- **Dr. Priti Sajja**, Professor & Head, Sardar Patel University, VVN
- **Dr. Viral Kapadia**, Associate Professor, MSU Vadodara
- **Dr. Jatayu Baxi**, Assistant Professor, DDU, Nadiad
- **Dr. Sonal Jain**, Professor, S.P.University, VVN
- **Mr. Maulik Pathak**, Associate Director, ACENDION, Vadodara

PATRONS

- **Shri. Surendrabhai Patel**, President, CHARUSAT
- **Dr. M. C. Patel**, Secretary, CHAMOSPKM
- **Dr. R. V. Upadhyay**, Provost, CHARUSAT

ADVISORS

- **Mr. Ashok Patel**, Advisor, CHARUSAT
- **Dr. R M Patel**, CHARUSAT
- **Dr. Atul Patel**, Registrar, CHARUSAT

ORGANIZING COMMITTEE

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ABOUT CHARUSAT

CHARUSAT aspires to advance learning and knowledge by teaching and research relevant to society. A remarkable range of programs offered at CHARUSAT are paired with an extraordinary breadth of extra-curricular activities and opportunities for research, independent study, and community services. CHARUSAT is recognized as the "Centre of Excellence" by the Government of Gujarat. The university is also A+ accredited by NAAC.

ABOUT CMPICA

CMPICA is a constituent institute of CHARUSAT under the Faculty of Computer Science and Applications (FCA). It was established in 2002.

CMPICA has been rated as 5-star by GSIRF for the last two consecutive years. CMPICA offers BCA, BCA (Online), BSc (IT), MCA, MCA (Online), MSc (IT), and PhD Programmes.

PROGRAM OBJECTIVE

- To empower participants with a comprehensive understanding of AI, NLP, and LLMs, along with the practical skills in real-world scenarios, to solve real-world problems and preparing them to contribute to the advancement of these technologies in society
- The course emphasizes practical learning, providing a foundation in Large Language Model(LLMs) by guiding participants in designing and implementing real-world applications.



Faculty of Computer Science and Applications

Smt. Chandaben Mohanbhai Patel Institute of Computer Applications

organizes



AICTE Training and Learning Academy

sponsored



Faculty Development Program on

Exploring Diverse Applications of Large Language Models: Case Studies and Implications

[December 02 - 07, 2024]



VENUE

Smt. Chandaben Mohanbhai Patel Institute of Computer Applications (CMPICA)

CHARUSAT Campus, Off Nadiad-Petlad Highway, Changa-388421
Dist. Anand, Gujarat, India

SCHEDULE

DAY - 1

02-DEC-2024 (MON)

08:30 – 09:00	<i>Inauguration</i>
09:00 – 11:30	Session-1: Keynote address on LLM and its applications
11:30 – 12:30	Journal Article: On the application of Large Language Models for language teaching and assessment technology
01:30 – 03:30	Session-2: Concepts of Deep Learning and its Use Cases
03:30 – 05:00	Training based on Session-2

DAY - 2

03-DEC-2024 (TUE)

09:00 – 11:30	Session-3: Image Classification & NLP with Deep Learning
11:30 – 12:30	Journal Article: LangTest: A comprehensive evaluation library for custom LLM and NLP models Software
01:30 – 03:30	Session-4: Transformer Learning and their use cases
03:30 – 05:00	Training based on Session-3 and 4

DAY - 3

04-DEC-2024 (WED)

09:00 – 11:30	Session-5: Future of LLM and their Impact on Various Industries
11:30 – 12:30	Journal Article: Prompt Engineering: Guiding the Way to Effective Large Language Models
01:30 – 03:30	Session-6: Advanced LLM Models and its Implications on Various Applications
03:30 – 05:00	Training based on Session-5 and 6

DAY - 4

05-DEC-2024 (THU)

09:00 – 11:30	Session-7: Exploring the Future of Generative AI and their Impact on Various Industries
11:30 – 12:30	Journal Article: Future applications of generative large language models: A data-driven case study on ChatGPT.
01:30 – 03:30	Session-8 (a): Building Custom LLMs for Specific Domains/ Chatbots / Question Answering
03:30 – 05:00	Session-8 (b): Practical exploration of LLM capabilities using a chosen platform (Google API / Hugging Face)

DAY - 5

06-DEC-2024 (FRI)

09:00 – 12:30	Industrial Visit
01:30 – 03:30	Session-9: Hands-on Practical Session on the Use of Generative AI and ML Tools for Next Generation Bio-medical Applications
03:30 – 05:00	Training based on Session-9

DAY - 6

07-DEC-2024 (SAT)

09:00 – 11:30	Session-10: Research Methodology on Artificial Intelligence
11:30 – 12:30	Journal Article Summary
01:30 – 03:30	MCQ & Reflection Journal
03:30 – 04:30	Valedictory Session

LUNCH BREAK ON EVERY DAY DURING 12:30 - 01:30

ABOUT FDP

In today's data-driven world, Artificial Intelligence (AI) is revolutionizing industries, with Natural Language Processing (NLP) and Large Language Models (LLMs) leading the charge. This course provides practical insights into AI, NLP, and LLMs, equipping participants with essential knowledge and skills.

- Comprehensive overview of Machine Learning, Deep Learning, and AI fundamentals
- Introduction to Natural Language Processing (NLP)
- Fundamentals of Machine Learning for NLP
- Understanding Large Language Models (LLMs): Architectures and Training Techniques
- Deep Learning Techniques for NLP: Transformers, Attention Mechanisms
- Pre-training for LLMs: Masked Language Modelling, Perplexity
- Fine-tuning LLMs for Downstream Tasks: Text Generation, Chatbots, Dialogue Systems
- Text Summarization: Extractive vs Abstractive Summarization
- Machine Translation using LLMs
- OpenAI API and other LLM Access Methods
- Prompt Engineering for Effective LLM Interactions
- Real-life Case Studies and Research Methodology
- Practical exploration using platforms like Google AI Platform and Hugging Face Transformers

REGISTRATION

Registration Fees: **NO Registration Fees**

Registration Link:

<https://atalacademy.aicte-india.org>

Application No.: **1716285836**



CERTIFICATION

E-Certificates shall be issued by AICTE Training and Learning (ATAL) academy to those participants who have attended the programme with minimum 80% attendance and scored minimum 70% marks in the test conducted at the end of the FDP.