COMPENDIUM

VISHWAKARMA INSTITUTES VI

Jul 2024

Top News

Smart India Hacakthon
VNRVJIT, Hydrabad

Won first prize worth Rs1,00,000

NAAC A++

In the context of higher education, institutes often strive to maintain high academic standards, as reflected by accreditation bodies like NAAC (National Assessment and Accreditation Council) in India. Achieving a high NAAC grade, such as A++, indicates excellence in areas like curriculum design, faculty qualifications, student support services, infrastructure, and overall governance.

FROM HOD DESK

About Issue

We are excited to present the latest edition of our department's newsletter, a platform to showcase the achievements, innovations, and activities of our vibrant community. The newsletter serves as a bridge between students, faculty, and alumni, highlighting key developments and providing insights into the department's ongoing efforts to stay at the forefront of computer engineering education and research.

Dr. M.L.Dhore
Professor,VIT PUNE

Approaches to Mixed Text Processing:
- Language Detection Algorithms
- Multilingual Embeddings
- Code-Mixed Data Augmentation
- Transliteration Models

Mixed Text Analysis

The rise of multilingualism in online communication has driven the need for robust mixed text analysis techniques. While the challenges of language detection, code-switching, and script variation are significant, advances in multilingual embeddings, pretrained models, and transliteration tools are paving the way for more accurate and efficient processing of mixed text. As the digital world continues to blend languages and scripts, research in this field will remain critical for enhancing cross-lingual communication and improving the accuracy of NLP applications

Dr.S.T.Patil
Professor,VIT PUNE

Large Language Models (LLMs) are advanced artificial intelligence systems designed to understand, generate, and manipulate human language. Large Language Models (LLMs) are used in a variety of real-time applications due to their ability to understand and generate human language.

How LLMs Work:

Training: LLMs are trained on massive datasets that contain a wide range of text from books, articles, websites, and more. During training, the model learns to predict the next word in a sentence, which ~~helps it understand context~~ and relationships between words.

Architecture: Most LLMs use transformer architectures, which consist of multiple layers of attention mechanisms. These mechanisms allow the model to focus on different parts of the input text, capturing complex dependencies and relationships. Inference: During real-time use, the model processes input text and generates responses or performs tasks based on its training. This involves:

Tokenization: Breaking down the text into manageable chunks (tokens).

Contextual Understanding: Using the learned patterns to interpret the meaning and context.

Generation: Producing text that is coherent and contextually relevant based on the input and the model's training.

Real-Time Applications are Customer Support, Chatbots, Help Desks, Virtual Assistants, Personal Assistants, Enterprise Assistants, Content Creation, Writing Assistance, Social Media, Language Translation, Real-Time Translation, Education, Tutoring, Language Learning, Healthcare, Medical Diagnosis Support, Patient Interaction, Coding and Development, Code Generation, Documentation, Finance, Customer Interaction, Market Analysis, Challenges and Considerations, Real-Time Processing, Accuracy and Ethical Use.

EDI Projects

40 Projects done by Second year students

44 Projects done by Third year students

Engineering Design and Innovation (EDI) is an educational approach where students actively engage in real-world projects to acquire deeper knowledge and skills. In the context of engineering education, it focuses on hands-on, student-centered experiences that drive learning through solving complex problems or creating products.

Key aspects of PBL in engineering:

- **Active Learning:** Students apply theoretical knowledge to practical projects, encouraging active participation and collaboration.
- **Critical Thinking and Problem Solving:** Through projects, students encounter challenges that require creative thinking, research, and problem-solving skills.
- **Teamwork:** PBL often involves group work, promoting communication, leadership, and collaborative skills.
- **Interdisciplinary Learning:** Projects may cover multiple domains of knowledge, integrating subjects like programming, hardware, software, and systems thinking in Computer Engineering.

won prize **20,000**

Event
TechSocho

Smart
India
Hackathon

won prize **1,00,000**

Smart India Hacakthon

FLAME Kurukshetra Step off Group Dance Competition

won prize 10,000

won prize 10,000

In-Bloom
Rhythmic Clan
Group Dance
Competition

CHRIST
(DEEMED TO BE UNIVERSITY)
LAVASA, PUNE • INDIA

Trance Group
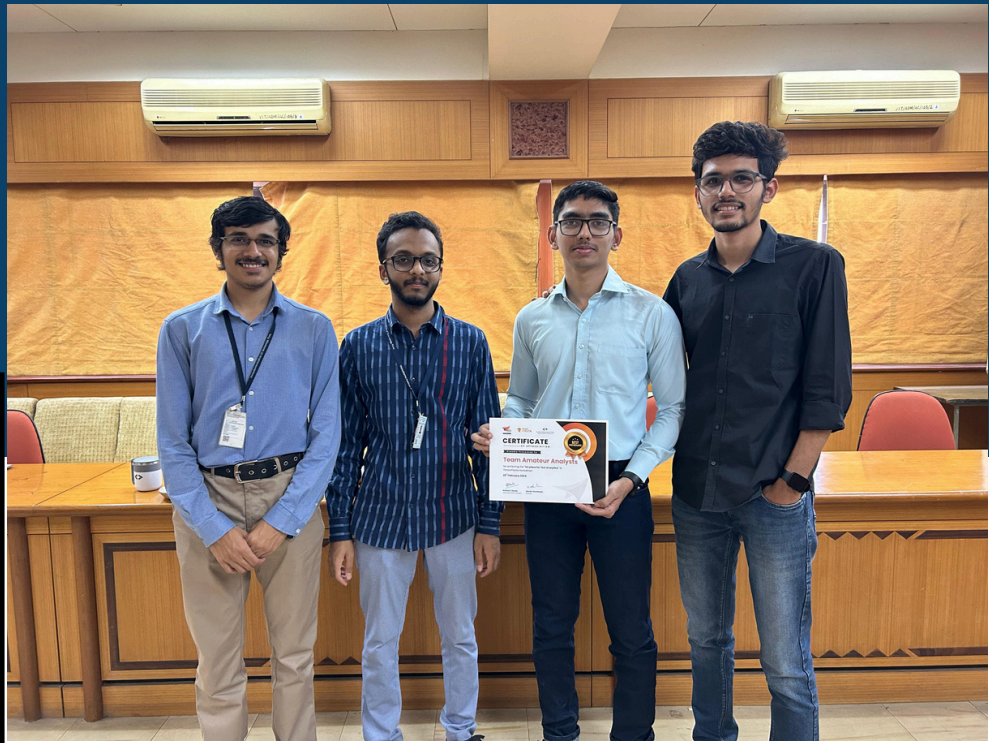Dance
Competition

RSONA FEST
10th 13th February 2024

Add a comment

won prize 25,000

won prize 8,000

TensorFiesta
hackathon

Alcheringa'24

First Prize

won prize 15,000

Technova

Innovation'24

First Prize Rs.40,000