भारतीय प्रबंध संस्थान बेंगलूर
INDIAN INSTITUTE OF MANAGEMENT
BANGALORE

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Transforming Possibilities:
Harnessing Generative AI with LLMs, GPT and ChatGPT

Workshop Instructor
Naveen Kumar Bhansali

28-29
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PRE CONFERENCE WORKSHOP

Transforming Possibilities:
Harnessing Generative AI with LLMs, GPT and ChatGPT

Workshop Overview:

Join us for an immersive Generative AI Workshop where you'll unlock the power of artificial intelligence to create, innovate, and push the boundaries of what's possible. Whether you're a curious beginner or an experienced practitioner, this workshop is designed to inspire and equip you with the skills to harness the creative potential of generative AI.

In this workshop, you'll dive deep into the world of generative AI, exploring cutting-edge techniques and practical applications across various domains. Through a combination of expert-led sessions, hands-on exercises, and collaborative projects, you'll gain a solid understanding of the underlying principles and tools used in generative AI.

Workshop Objective

Join us at the workshop on Generative AI to embark on a transformative learning journey, engage with leading experts in the field, and become a proficient practitioner in the exciting realm of generative artificial intelligence.

By the end of the workshop, participants will have gained a comprehensive understanding of generative AI principles and techniques, obtained hands-on experience through practical exercises and projects, and developed the ability to apply generative AI in real-world scenarios.

Pedagogy

Combination of lectures, hand-on sessions and case discussions will be used during the course.

Workshop Content

- **Topic: Introduction to Generative AI**
  Definition and scope of Generative AI
  Overview of generative models and their applications
  Importance of Generative AI in various domains
  Brief discussion on ethical considerations and challenges

- **Topic: Language Models and LLM Architectures**
  Introduction to language models and their role in AI
  Traditional approaches to language modeling
  Deep learning-based language models and their advantages
  Overview of popular LLM architectures: RNNs, LSTMs, and Transformers

- **Topic: Understanding GPT (Generative Pre-trained Transformer)**
  Introduction to GPT and its significance
  Pre-training and fine-tuning processes in GPT
  Architecture and working of GPT models
  Overview of GPT variants and their use cases

- **Topic: ChatGPT: A Practical Application of GPT**
  Introduction to ChatGPT and its purpose
  Training data and techniques for ChatGPT
  Handling user queries and generating responses
  Tips for improving ChatGPT's performance

- **Topic: LangChain: Simplifying Development with Language Models**
  Introduction to LangChain and its objectives
  Overview of the LangChain framework and its components
  Streamlining application development using LangChain
  Examples of applications built with LangChain

- **Topic: Prompt Engineering: Enhancing Model Outputs**

  Understanding the concept and significance of prompt engineering
  Strategies for designing effective prompts
  Techniques for controlling model behavior and output quality
  Best practices for prompt engineering in generative AI

- **Topic: Ethical Considerations in Generative AI**
  Understanding the ethical implications of generative models
  Addressing bias and fairness in generative AI systems
  Ensuring responsible use and deployment of generative models

- **Topic: Use Cases of Generative AI**
  Overview of various domains and industries benefiting from Generative AI
  Use cases in natural language processing, content generation, and creative applications
  Case studies highlighting successful implementations
  Potential future applications and emerging trends

- **Topic: Hands-on Exercise and Q&A**
  Participants engage in a practical exercise using GPT or ChatGPT
  Guided step-by-step exercise on prompt engineering and customization
  Open Q&A session to address participant queries and concerns

Participant profile / Who should participate

The ideal participant for this workshop possesses a background in computer science, artificial intelligence, machine learning, or a related discipline. However, the workshop welcomes participants from diverse professional backgrounds who are keen to delve into the world of generative AI. Whether you are a seasoned data scientist, a software engineer, a researcher, or even an enthusiast passionate about AI, this workshop will offer valuable insights and hands-on experiences.

The workshop content is tailored to accommodate both beginners and those with intermediate knowledge in generative AI. Beginners will gain a solid understanding of the fundamental concepts and techniques, while more experienced participants will have the opportunity to explore advanced topics and cutting-edge research.

Workshop Instructor

Naveen Kumar Bhansali
Adjunct faculty Member IIM Bangalore

Naveen Kumar Bhansali an adjunct faculty and alumni of IIM Bangalore, has 15+ years of industry experience as advisory consultant, senior solution architect and data scientist in Data Science, Machine Learning and Deep Learning, Big Data and Automation Platform for various domains/verticals such as insurance, health-care, telecom, retail, FMCG, e-commerce, and IT – Exchange & Storage across the globe, mainly South America, Europe and Asia Pacific region for clients such as Embraer Brazil, FWD Hong Kong, Bank of Thailand, TIM Brazil, Hawaiian Telecom USA, Bank of Ayudhya in Thailand, ASOS UK, VTC Hong Kong, etc.

He is the Vice President of Analytical Society of India, which is the first and the largest body of analytics professionals and organisations in India. He has done Chartered Financial Analyst (CFA) Level 2 and is Director of R&N Capital Market Pvt. Ltd., which is into stock broking and capital market analysis.

He has also published two analytical case studies published at Harvard Business Publications:
- Customer Analytics at Flipkart.com
- Breaking Barriers – Micro-mortgage Analytics