

Contact person: Raj

Moble/Whatsapp: +91-9347045052 / 09032803895

Dilsukhnagar, Hyderabad

Email: info@ruchiwebsolutions.com

Course name: GenAI ML Training with Live Project.

CAN YOU CALL/WHATSAPP ME AT 91-9347045052 TO MY MOBILE TO PLANNING AND EXECUTION OF THIS TRAINING. Can you attend demo class today or tomorrow, call me once.

Project Covered During Training: Real Time Project Training

GenAI ML Real Time Project: Trainer is going to teach one real time Project using **GenAI ML** which is going to be Real Time Experience. The Trainer will give you one assignment project also and you will do assignment project in your home to make sure that you understand the subject clearly.

Certification: Yes I will provide you Certificate after successfully attending the class this will help you in job assistance. I am also helping you in help placement.

Placement and Job: I will give placement assistance. Because I am giving you real time training with live project so definitely it will help you in job. I have tie up with good company who hire my students.

My address for Class room training: Ruchiwebsolutions,#201,Datta Sai complex ,Beside IKON hospital, Landmark: Near to Vijaya Diagnostic Centre, Dilsukhnagar, Hyderabad, call if any problem to 09347045052.

Trainer Profile

I am **Ranjan Raja** master degree in computer from Utah State University, USA. I am part of **ruchiwebsolutions** in **Dilsukhnagar, Hyderabad**. I have total 20+ years of experience in **GenAI ML** with drupal, joomla and wordpress, codelgnitor,laravel, yii and **angularJs And nodeJS**. I have developed 200 dynamic website till now on php/mysql and **angularJs And nodeJS**. I have 20 years of experience in Online and class room training. I already given the training to some of the corporate company from UK, USA, Malaysia and India in PHP, mysql and **angularJs And nodeJS**. I have worked with

international clients based in USA, UK, Canada, Netherlands, Australia, Italy, Ireland, France etc. I have worked on many different projects - ranging from small software to complex web applications.

I have a training Institute in **Dilsukhnagar, Hyderabad** with the name “**Complete Lamp Institute**” in **Dilsukhnagar, Hyderabad**. I have already given training of 2500 Students till now, and all working in MNC and Software web Development Company.

Our Teaching style: I give real time training with real PROJECT IN DevOps. Basically, I am developer of 20 years of experience so I will try to give my best output in GenAI ML training.

GenAI ML Content:

GenAI and It's Industry Applications

- Introduction to Generative AI.
- AI vs ML vs DL vs NLP vs Generative AI.
- Generative AI principles.
- What is the role of ML in Gen-AI.
- Different ML techniques (Supervised, Unsupervised, Semi-supervised & Reinforcement Learning).
- Applications in various domains.
- Ethical considerations.

NLP & Deep Learning

- NLP essentials.
- Basic NLP tasks.
- Different text classification approaches.
- Frequency-based – Bag of words, TF-IDF, N-gram.
- Distribution Models – CBOW, Skipgram(Traditional approaches)and word2vec, Glove.
- Ensemble Methods (Random Forest, Gradient Boosting, AdaBoost) & Traditional Machine Learning Models – Naïve Bayes, Support Vector

Machine (SVM), Decision Trees, Logistic Regression.

- Deep learning techniques – CNNs, RNNs, LSTMs, GRU and Transformers.

Generative AI Models

- Autoencoders.
- VAE's and applications.
- GANs and it's applications.
- Different types of GANs and applications.

Language Models & Transformer Models

- Different types of Language models
- Applications of Language models
- Transformers and its architecture
- BERT, RoBERTa, GPT variations
- Applications of transformer models

Prompt Engineering

- What is Prompt Engineering
- What are the different principles of Prompt Engineering
- Types of Different Prompt Engineering Techniques
- How to Craft effective prompts to the LLMs
- Priming Prompt
- Prompt Decomposition

Large Language Models

- Generative AI lifecycle
- What is RLHF
- LLM pre-training and scaling

- Different Fine-Tuning techniques

LLM's Embeddings

- What are word embeddings
- What is the use of word embeddings, where we can use it?
- Word Embeddings – Word2Vec, GloVe and FastText
- Contextual Embeddings – ELMo , BERT and GPT
- Sentence Embeddings – Doc2Vec, Infersent, Universal Sentence Encoder
- Subword Embeddings – BPE(Byte Pair Encoding), Sentence Piece
- Usecase of Embeddings.

Different Chunk Metrics

- What is Chunking
- What is the use of chunking the document
- What are the traditional effective chunking techniques
- What are the problems and limitations with traditional chunking techniques?
- How to overcome the limitations of Traditional chunking
- Advanced Chunking Techniques:
 1. Character Splitting
 2. Recursive Character Splitting
 3. Document based Chunking
 4. Semantic Chunking
 5. Agentic Chunking

RAG and Advanced RA with Langchain

- What is RAG
- What are the main components of RAG
- High level architecture of RAG

- How to Build RAG using external data sources
- Advanced RAG

Langchain for LLMs

- What is Langchain
- What are the core concepts of Langchain
- Components of Langchain
- How to use Langchain agents

Vector Databases

- LlamaIndex
- What are Vector Databases
- Why do we prefer Vector Databases over Traditional Databases
- Different Types of Vector Databases: OpenSource and Close Source
- OpenSource: Chroma DB, Weaviate, Faiss, Qdrant
- Close-Source Vector Databases: Pinecone, ArangoDB, Cloud-Based Solutions

Finetuning LLMs

- Supervised Finetuning
- Repurposing-Feature Extraction
- Advanced techniques in Supervised Finetuning -PEFT -LoRA, QLoRA

LLMs Evaluation

- Text based LLMs:
Automatic Evaluation: BULE Score, ROUGE Score, METEOR, BERT Score.
Human Evaluation: Coherence, Factuality, Originality, Engagement
- Image based LLMs:
Automatic Evaluation: Pixel-level metrics, FID (Frechet Inception Distance), IS (Inception Score), Perceptual Quality Metrics, Diversity Metrics.

Human Evaluation: Photorealism, Style, Creativity, Cohesiveness

- Audio generation LLMs:
Automatic Evaluation: FAD (Frechet Audio Distance), IS (Inception Score), Perceptual Quality Metrics – PAQM, PAQM – SNR (Signal-to-Noise Ratio), PAQM – PESQ (Perceptual Evaluation of Speech Quality)
Human Evaluation: Perceptual Quality – PQ, PQ- Naturalness, PQFidelity, PQ-Musicality, Task Specific Evaluation.
- Video Generation LLMs:
Automatic Evaluation: FVD (Frechet Video Distance), Inception Score(IS), Perceptual Quality Metrics, Motion Based Metrics – Optical Flow Error, Content-Specific Metrics.
Human Evaluation: Visual Quality, Temporal Coherence, Content Fidelity.

LLMops

- Model Deployment and Management
- Scalability and Performance Optimization
- Security and Privacy
- Monitoring and Logging
- Cost Optimization
- Model Interpretability and Explainability.

LLM's on Cloud

- Amazon Bedrock, Azure OpenAI

Different AI Tools

- ChatGPT, Gemini, Copilot

SPECIFICATION: FEE AND TERMS DETAILS	
Technology:	GenAI ML
Operating System:	Windows 2003, XP
Webserver	Apache
Database	Mysql
Time Frame(duration):	30 Days [Daily 60 minutes, Weekly 5 hours]
Online Training Fee	Per student 15000 Rs

Terms and Conditions of Payment.		
1	Advance payment ,after demo class	50% money
2	After 8 Class	Remaining 50%
Extra topics will be chargeable. Payment by Cash		

Required Software for Training: Note: I will provide all the software.

- 1) XAMPP Software,
- 2) Dreamweaver
- 3) I will take class though Gotomeeting for online class. Every session will be created on video for online class. Class room training will be given at my office location.

Payment though paypal : Send payment in my ICICI or HDFC Bank Account or in my paypal id paypal id: payment.ruchiwebsolutions@gmail.com

Raj,

Director Complete LAMP Institute – Business Development

For any questions you may have you may contact myself at Email info@ruchiwebsolutions.com

For any doubt and clearance, call me/whatsapp in India: 09032803895

Once fee is paid, not return back.

Website: <http://www.ruchiwebsolutions.com/>

