PANCHADIP BHATTACHARJEE

Contact: 8116760429 | **E-mail**: panchadip125@gmail.com

https://www.linkedin.com/in/panchadip-192388228/

https://github.com/Panchadip-128

SKILLS:

Generative AI | Deep Learning |Machine Learning | NLP| LLMs| Chatbots | ChatGPT| Llama | Gemini | Langchain | Voice Bots Currency Convertors | Python | TensorFlow | Deep Neural Networks |CNNs |RNNs|LSTM |Prompt Engineering| RAGs| MLOps |DevOps| Pipelines | AWS| Azure| Keras| PyTorch| Flask| StreamLit| VAE's | Transformers Architecture and Frameworks| FinetuningLLMs| Article Summarization | Text Generation | Image Generation Models | Speech Recognization Models

EDUCATION:

Manipal Institute of Technology,   **2023-2027 (Expected)**
Manipal Academy of Higher Education- Manipal, Bengaluru Campus
Bachelor of Technology-Computer Science & Engineering (Artificial Intelligence)
Grades:8.62 GPA

RELEVANT PROJECTS:

- **CURRENCY CONVERTER CHATBOT - WITH DIALOGFLOW:** Developed a real-time currency converter chatbot using Dialogflow, supporting 150+ currencies with <1s response time and 99% API accuracy, leveraging Python and REST APIs.
- **DISCORD CHATBOT**: Created a Discord chatbot handling 50+ commands for 500+ users with over 89.9% accuracy in responses, increasing traffic by over 15%, utilizing the Discord API and cloud hosting.
- **VOICE ASSISTANT BOTS**: Built voice assistant bots with 95% accuracy, <2s response time, and multilingual support (5 languages), integrating speech recognition and Google Assistant API.
- **LANGCHAIN ARTICLE SUMMARIZER:** Implemented LangChain article summarizers with 90% accuracy, <1s processing speed, and 300+ user adoption, using NLP models and Python.
- **LANGCHAIN TEXT GENERATOR**: Designed a LangChain text generation model delivering <2s response time, 85% content quality, and 10+ applications, based on GPT models and Python.
- **IMAGE CLASSIFICATION LLMs:** Developed image classification LLM models achieving 92% accuracy and <1s processing speed on a 50,000+ image dataset, utilizing TensorFlow and Python.

EXPERIENCE:

Codsoft-Machine Learning Intern   **03/2024 - 04/2024**

- Created Langchain Article Summarizers and Text Generators
- Enhanced content creation efficiency by 70%, leading to substantial time and cost savings by over 25%
- Improved user engagement and satisfaction by providing high-quality, automatically generated summaries and content. resulting in 15% more traffic on the model applications.
- Generates summaries with an average compression ratio of 85% while maintaining a 95% accuracy.

RESEARCH PAPERS:

- Working on paper entitled "**Effect of LLM on cultural studies and evolving technology** Description: Researching the impact of Large Language Models on cultural-shift and their role in advancing technology
- Investigating on paper " **Role of Reinforcement Learning in developing future AI Technology"** Overview: Exploring how reinforcement learning contributes to advancements in AI technology and its potential future uses
- Exploring aspects of employability through paper **"Predicting Job Satisfaction and employability based on 'Ratings' of Top 10,000 companies"**

COURSES & CERTIFICATIONS:

- **"Generative AI for Everyone" by DeepLearning.AI on Coursera:**
  Skills and Technologies: Large Language Models (LLMs), Retrieval-Augmented Generation (RAGs), Finetuning Models, Prompt Engineering, Generative Adversarial Networks (GANs), Explainable AI, Transformers, GPT Models, Sequence-to-Sequence Models, Neural Networks.
- **Microsoft Azure Certifications on Coursera:**
  Skills and Technologies: Explainable AI, Generative AI, Pipeline Inferences, Ethical AI, RAGs, Model Deployment, Variational Autoencoders (VAEs), Cloud Computing, Data Preprocessing, Feature Engineering, Microsoft Azure Machine Learning, Cognitive Services, AI Model Monitoring.
- **"IBM Generative AI for Professionals":**
  Skills and Technologies: AI Model Training, Deployment, Fine-tuning, Langchain, Prompt Engineering, ChatGPT, Gemini, Hugging Face, Llama, Flask, VAEs, OpenAI APIs, AI Tools and Platforms, Model Optimization, API Integration, Data Augmentation, Scalability in AI, Multi-Modal AI.
- **IBM AI Professional Course on Coursera:**
  Skills and Technologies: Computer Vision, Image Classification, Deep Learning, Machine Learning Models, Natural Language Processing (NLP), Convolutional Neural Networks (CNNs), Recurrent Neural Networks (RNNs), Transfer Learning, Time Series Analysis, Anomaly Detection, AI Ethics and Bias, Explainable AI.

ACHIEVEMENTS:

- **AICTE Scholar** - Received Scholarship in terms of Fee-Waiver of Rs 11,00,000 as Merit-cum-means remission based on Manipal Entrance Test Score.
- Placed in **top 0.110%** out of 70,000 candidates in Manipal Entrance Test examination
- Achieved a percentile ranking within the **foremost 0.104%** among 1.2 million candidates in the JEE Main (Joint Engineering Examination) 2023.

POSITIONS OF RESPONSIBILITY

- Project Manager & Innovation Architect, Manipal Bengaluru Open Source Community
- Vice President, Nexus Community, Null-OWASP Student Chapter
- Technical Vice Chair- Apex Community,MIT
- Executive Committee Member- ACM Student Chapter- MIT Bengaluru
- Volunteer & Content Writer - Volunteer Service Organisation (VSO- MAHE, Manipal)
- Class Representative