Education

Jagannath University

2022 - 2026

Delhi

Bachelor of Science in Computer Science with Artificial Intelligence and Machine Learning

Relevant Coursework

- Data Structures • Linear Algebra
- Computer Vision
- Database Management
- Artificial Intelligence
- Data Science Probability
- Data Analytics

Experience

Gudsky Research and Development

November 2024 – Present

Artificial Intelligence Research Intern (Remote)

Howrah, West Bengal

• Image-to-Text and Text-to-Image Generation: Developing models that can generate textual descriptions for images or create realistic images based on textual inputs (e.g., DALL·E, Flamingo)

YBI Foundation

August 2024 – November 2024

Data Science Intern New Delhi

- Designed and implemented a state-of-the-art character-level Recurrent Neural Network (RNN) to generate text that mimics human handwriting.
- Conducted a comprehensive analysis of traffic accident data to unveil patterns and contributing factors. Utilized advanced data visualization techniques to identify accident hotspots and key contributing factors, providing actionable insights for improving road safety

Projects

LSTM Networks | Python, TensorFlow/Keras

January 2021

- Developed an LSTM-based predictive maintenance system to forecast equipment failures in real-time, reducing downtime and optimizing operational efficiency.
- Implemented a model pipeline that included data preprocessing, feature engineering, and hyperparameter tuning to achieve high prediction accuracy.

GANs | Python, TensorFlow/Keras

November 2020

- Built a GAN architecture to generate realistic synthetic data/images, addressing data scarcity issues in training other models.
- Conducted experiments with various loss functions and generator-discriminator architectures to enhance image quality and diversity.

Chatbot | Python, NLP, Flutter, Javascript, CSS/HTML

October 2020

- Designed and developed Gyandoot, an intelligent chatbot aimed at providing users with accurate and instant responses to queries across diverse topics.
- Implemented features such as conversational flow, intent recognition, and entity extraction to ensure high engagement and precision.
- Used openCV to recognize hand patterns and has a voiceover.

Technical Skills

Languages: : Java, Python, C++, SQL, HTML/CSS Developer Tools: VS Code, Power Bi, R Studio

Technical Skills: Machine Learning, Deep Learning, Natural Language Processing

Certificates

- Machine Learning Course Certificate by DeepLearning. AI and Standford University by Andrew NG).
- Oracle Cloud Infrastructure 2024 Generative AI Certified Professional

Extracurricular

- Ranked 1st position in inter-house competition in Chess and 3rd in zonal for chess(sub-junior)).
- Attended a seminar on Generative AI by Vivekananda Sinha (Author and CEO of Future in Hands)