# Abhay Pancholi

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## **EDUCATION**

#### **CSMSS CSCOE**

BTECH IN ARTIFICIAL INTELLIGENCE AND DATA SCIENCE July 2021 - June 2024 CGPA: 8.48/10.0

## LINKS

GitHub:// AbhayPancholi LinkedIn:// abhaypancholi Kaggle:// abhaypancholi Coursera:// AbhayPancholi Portfolio:// AbhayPancholi

# COURSEWORK

Probability and Statistics
Deep Learning
Machine Learning
Data Analysis
Cloud Computing
Computer Vision
Artificial Intelligence
Natural Language Processing
Computer Networks

# SKILLS

**Programming Languages** 

- Python Java R SQL Databases:
- MySQL• MongoDB Data Science Tools
- Huggingface Tensorflow RAG Langchain Scikit-Learn Pandas NLTK
- OpenCV Matplotlib Seaborn •
- XGBoost Scipy PowerBI Teableau •
- TFX PyTorch Transformers GANs
- •VAEs •Tensorflow.js TFLite Deep Sort

Tools

• Git • GitHUb

# **CERTIFICATIONS**

Machine Learning Tensorflow Developer NLP Specialization Deployment Data Analytics

#### **EXPERIENCE**

## ABW IT SOLUTIONS PVT LTD. | RPA DEVELOPER

Mar 2023 - May 2023 | Aurangabad, MH

- A transformative 2-month internship played an instrumental role in conceiving and developing innovative, groundbreaking applications centered on Robotic Process Automation (RPA).
- Attained comprehensive practical expertise across the entire application development lifecycle within the RPA domain, while successfully executing and delivering 4 high-impact, distinct RPA projects throughout the internship.

## **PROJECTS**

#### ROBUST HUMAN TARGET DETECTION AND ACQUISTION

- Developed a deep learning model using the YOLOv8 architecture to detect and classify 3 types of human actions—running, jumping, and walking—in video frames and images.
- Attained a precision rate of 92 percent for running and 89 percent for jumping actions on a dataset of 700 images, demonstrating the system's efficacy in identifying specific human movements.

#### **CUSTOM TRANSFORMER-BASED TEXT SUMMARIZATION**

- Constructed a text summarization model using the transformer architecture, incorporating both encoder and decoder components, achieving a final loss of 0.98 after 20 epochs.
- Preprocessed dialogue and summary datasets, utilizing custom tokenization and positional encoding, resulting in an average summary accuracy of 85 percent.

#### MEDICAL PLANTS IDENTIFICATION USING CNNS

- Achieved notably higher training and test accuracies compared to benchmark results from a related 2023 research paper, showcasing advancements in model performance.
- Improved research techniques, resulting in an accuracy of 99.65 percent, exceeding previous benchmarks through thorough data analysis and technology integration.

## **GOOGLE-T5-BASED QUESTION ANSWERING**

- Designed a question-answering model leveraging the T5 transformer, focusing on fine-tuning pre-trained models for improved performance on the SQuAD 2.0 dataset.
- Reached an accuracy rate of 88 percent after 15 epochs, demonstrating significant improvements in handling complex queries.

# **ACHIEVEMENTS**

- Delivered a substantial 20 percent improvement in training and validation accuracies over 2023 benchmark research results.
- Surpassed established performance benchmarks set by prior research methods, with the proposed approach achieving a remarkable 99.65 percent accuracy.