Jyotsan Hamal

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Experience

Intern at **Subiz Innovations** as Python Automation Engineer

- Jun 2023 - Nov 2023 · 6 months
  - **Data Extraction** : Made a python bot which extracts the Nepal stock exchange stocks data into a csv file.
  - **OCR** : Used a **PaddlePaddle** OCR which converts Bank statement images,pdf into excel sheet.
  - **Data Cleaning** : Extracted data from different sites which i was able to clean for ML model training

Projects

Face Recognition Based Attendance System: As a backend developer, I played a pivotal role in the development of a Face Recognition Based Attendance System. My responsibilities included real-time face recognition implementation. I contributed to the project's success by managing databases, ensuring seamless data flow, and integrating various components. This System features an admin dashboard for efficient monitoring of student attendance. **Github** : Link

Libraries used :
- OpenCV
- Django
- Tensorflow
- PostgreSQL
- OpenVino

Inbrowser Proctoring: As part of a fellowship, my team and I are developing an AI-based proctoring system for online exams. This system integrates advanced AI and computer vision technologies such as face detection, gaze tracking, head pose detection, mobile phone detection, and multi-person detection. The goal is to ensure exam integrity by accurately detecting suspicious behavior while respecting student privacy. By implementing these features into a web application, we aim to enhance the reliability and security of online testing, balancing automated AI monitoring with human review.

Libraries used :
- FastAi
- Pytorch
- FastAPI
- MySQL
- Dlib
- Intel OpenVino
- YOLO

TempleVision: For my Final Year project, I undertook the development of TempleVision. In this project, I fine-tuned the generative model DeOldify using 2,500 colorful images of temples, specifically from Kathmandu, the capital city of Nepal. The primary goal was to enhance the model's ability to colorize black-and-white photos into vibrant, colorful images, preserving the cultural essence of the temples. **Github** : Link

Libraries used :
- Fastai
- Django
- Pytorch
- Django
- React
- REST API

AskPDF: I developed AskPDF as a personal project to enhance document-based learning and research. This platform utilizes retrieval-augmented generation (RAG) techniques, allowing users to upload PDF documents and interact with the content through natural language questions.**Github** : Link

Libraries used :
- Langchain
- Chroma
- FastAPI
- Streamlit
- Pyttest
- WebSocket

EyeMate: As a backend developer, I developed an API for this e-commerce project, where my responsibilities included implementing JWT authentication and creating authorization middleware. I also used Multer to allow the admin to upload new product images. **Github** : Link

Libraries used :
- Express • Bcrypt • JWT • Mongoose • Multer • REST API

Others:
- Book Recommendation System
- Health Diagnose System
- Live Stock Data Webscraper
- OCR for bank documents

Training

AI Fellowship

- **Fusemachines** | Apr - Oct 2024
  - Engaged in a comprehensive AI fellowship focused on advanced machine learning, deep learning, and computer vision
  - Applying technologies like face detection, gaze tracking, and head pose detection in Fellowship projects.

MERN Training

- **Codroidhub** | 40 hours
  - Completed a MERN stack training program, gaining expertise in MongoDB, Express, React, and Node.js
  - Developed the EyeMate e-commerce website where the admin can add, update, and delete products, while users can view products and add them to their cart.

Education

Lincoln University
Maitidevi, Kathmandu
2022-2025

Bachelor of Information Technology
- BIT (Final Year)

Hope International College
Karkando , NPJ
2019-2021

High School

I hereby declare that the information provided is purely truthful and if any misinformation is being encountered then I will be solely responsible for the inconvenience and circumstances.

Thank You