Niranjan Shah

☎ 0432518736

✉ niranjanshah474@gmail.com

🌐 www.niranjanshah.com.np

Summary

As a dedicated Master's candidate in Data Science at the University of Canberra, I'm keen to leverage my in-depth knowledge of machine learning, deep learning, and natural language processing in a challenging role. I possess strong problem-solving skills and have the ability to thrive in both collaborative and autonomous environments. My fast learning abilities and resilience in high-pressure situations, coupled with a strong commitment to excellence, position me well for a demanding machine learning and data science role.

Education

2017-2021
BACHELOR OF COMPUTER ENGINEERING
Tribhuwan University
Kathmandu, Nepal

2022-Current
MASTER OF DATA SCIENCE
University of Canberra
Canberra, Australia

Languages

- Nepali (Native)
- Hindi (Proficient)
- English (Proficient)

Experience

Dec 2021 - Aug 2022
Citrana Creatives, Nepal

JR. SOFTWARE ENGINEER
Involved in the creation of database, software requirement specification, data flow diagram, etc. required for projects. Developed backend for management systems, managed the database, and involved in the creation of frontend as well using React.js and Material UI

Nov 2020 - Sep 2021
Digital Office Technology, Nepal

BACKEND DEVELOPER
Developed database designs, implemented the database in SQL, POSTGRESQL, and NoSQL. Developed backend of School management system and other similar management systems using Laravel

Paper Published

"FILE SECURITY SYSTEM USING HYBRID CRYPTOGRAPHY AND FACE RECOGNITION"
Presented in 2nd International Conference on Mobile Computing and Sustainable Informatics (ICMCSI 2021)
https://link.springer.com/chapter/10.1007/978-981-16-1866-6_38

Skills

- HTML, CSS, JavaScript
- React.js, Django, Node.js, FastAPI, SQL
- Git, Github
- Software and Web Development
- Machine Learning, NLP
- Exploratory Data Analysis, Data Cleaning,, Data Visualization
- Tensorflow, PyTorch,, Scikit-learn

Projects

Sentiment Analysis Using Deep Learning

- Used Sentiment140 dataset to create a deep learning model for the purpose of prediction of sentiment of that text, either positive or negative.
- Used pandas to load and clean the data
- Used gensim to create a word2vec model for converting a sentence to embeddings understandable by the deep learning model.
- Used LSTM from tensorflow to develop the deep learning model
- The models were trained on jupyter nootebooks.
  - Link: *https://github.com/niranjanblank/TweetSentimentAnalysisUsingDeepLearning*
- Created a backend server using fastAPIto deploy the deep learning model
  - Link: *https://github.com/niranjanblank/SentimentAnalysisBackend*
- Created frontend for classifiying text and seeing the prediction of model using React.js
  - Link: *https://github.com/niranjanblank/SentimentAnalysisFrontend*
- Deployed the backend server on AWS EC2 instance, and deployed frontend at vercel
  - Link: *https://sentiment-analysis-frontend.vercel.app/*

Exploratory Data Analysis on Facebook Data

- Analysed facebook data in python using pandas, numpy, matplotlib, seaborn
- Found out which gender has more users
- Analysed the number of likes collected on web and mobile to find out which platform is used more.
- Found out other information like which gender initiate friendships, most active age group, correlation among the columns, etc
- Link: *https://github.com/niranjanblank/DataAnalysisOnFacebookData/blob/master/data_analysis.ipynb*

Plant Disease Vision

- Application to detect disease in plant using their leave images, and provide possible solution to the detected disease.
- Used New Plant Disease Dataset on kaggle having 38 classes for training the model and testing
- Used PyTorch for training the model
- Used resnet50 pretrained model for transfer learning and achieved an accuracy of 97%
- Deployed the project on streamlit (https://niranjanblank-plantdiseasevision-streamlit-app-5w8lq5.streamlit.app/)
- Github Link: *https://github.com/niranjanblank/PlantDiseaseVision*

Airbnb Data Analysis

- Cleaned and prepared a large Airbnb dataset for analysis and modeling.
- Performed Exploratory Data analysis and identified key patterns and trends in the data through visualizations.
- Built a Random Forest Regression model to predict Airbnb listing prices.
- Used cross-validation and RMSE for rigorous evaluation of the model's predictive performance.
- Derived key insights, identified business opportunities, and presented findings through an interactive dashboard.
- Github Link: *https://github.com/niranjanblank/AirbnbDataAnalysis*