Tilak Parajuli | +977 9864585656 | tilak.parajuli.58@gmail.com

Experience with Data Analysis, Data mining, ML and IR. Hopes to focus on NLP and advanced ML algorithms in future carrier.

Work Experience

NAAMII - AI Research Intern . 3rd June 2024 – 2nd Sept 2024 (3 months)

- Contributed to the radiation oncology project, focusing on clinical and radiomics data analysis.
- Conducted data preprocessing, normality testing, statistical tests, permutation test, ROC AUC, correlation analysis on independent and dependent sample.
- Developed statistical models and machine learning algorithms under the supervision of Dr. Taman Upadhaya.
- Engaged in research involving Statistical Analysis, Machine Learning, NLP, and Deep Learning techniques.
- Demonstrated a strong commitment to innovation and advancing AI research.

Treeleaf Technologies - ML Intern . Apr 2023 – Oct 2023 (7 months)

- Labelled Data for OCR system.
- Played with different ML algorithms and utilized industry-standard frameworks and libraries like NumPy, Pandas, Matplotlib, and Scikit-learn.
- Performed EDA, Feature Engineering, Data Pre-processing tasks and analyzed and visualized them.

Personal Projects

Text Summarization with LSA and T5 Transformers

- Implemented text summarization using Latent Semantic Analysis (LSA) and T5 transformers, achieving concise and coherent summaries.
- Developed a TF-IDF threshold feature to display previews for all summaries in a left-side navbar.
- Achieved good ROUGE scores, demonstrating the effectiveness of the summarization systems.

OCR Project

- Created text extraction system using Spacy and Tesseract for efficient document processing.

Music Recommendation System using SVD

- Developed a personalized music recommendation system by applying Singular Value Decomposition (SVD) for matrix factorization, enabling accurate predictions of user preferences.

Skills

Data Mining

Python - numpy, pandas, sklearn

ML

Python - Apriori, FP-Growth, ID3, Bayesian, Laplace, backpropagation, Rule based classifier, SVM, k-means, k-means++, Mini-Batch k-means, k-medoids, Agglomerative, DBSCAN, xgboost and regression analysis

Information Retrieval

Python - Porter Algorithm, TF, IDF, TF-IDF weighting, Cosine Similarity, Vector space model, LSI, SVD

Data Analysis

SQL, python, seaborn, Statistics Data preprocessing, Data Visualization, Cleaning, Normality testing, Statistical testing based on data, Permutation testing, ROC, AUC, Correlation Analysis, Feature extraction

Education

Tribhuwan University : 2019- 2024 (**GRADUATED**)
Bachelor : Bsc.CSIT
Bhaktapur Multiple Campus
Dudhpati- 1, Bhaktapur
Percentage Maintained : above 78%

Certifications

- Programming in Python
- Elements of AI : Introduction to AI
- Mindware: Critical Thinking for the Information Age
- An Intuitive Introduction to Probability
- Introduction to Mathematical Thinking
- Computer Science: Algorithms, Theory, and Machines
- Computational Thinking for Problem Solving
- Machine Learning
- Introduction to Calculus
- Data Science Math Skills
- Machine Learning Pipelines with Azure ML Studio
- Supervised Machine Learning: Regression and Classification
- Unsupervised Learning, Recommenders, Reinforcement Learning
- Natural Language Processing with Attention Models
- Advanced Learning Algorithms
- Probability and Statistics: To p or not to p?
- Introduction to Mathematical Thinking