BISHWA KARKI

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EDUCATION

University of Nebraska Omaha, USA *2022-Present*
Masters in Computer Science(AI Specialization)

Paschimanchal Campus, Institute of Engineering, Tribhuvan University *2015-2019*
Bachelor of Computer Engineering

Relevant Coursework: Linear Algebra, Calculus, Probability and Statistics, Computer Programming, Digital Signal Analysis and Processing, Data Mining, Artificial Intelligence, Database Systems, Big Data Technology

WORK EXPERIENCE

University of Nebraska Omaha August 2022 - Present
Research Assistant *Omaha, Nebraska, USA*

· Research Assistant on Deep learning based image watermarking

Terakoya Academia March 2022 - July 2022
Software Engineer(ML) *Kathmandu, Nepal*

· Worked on OCR project for document parsing

Ncell Nepal December 2021 - March 2022
ML Engineer and Data Science Consultant *Kathmandu, Nepal*

· Employed as a ML Engineer and Data Scientist Consultant at Ncell, a telecommunications firm, where I assists in building Center of Excellence for AI services to generate insights from their data and building automated system.
· Worked on analysis of fradulent SIM activation and automation

Fusemachines Nepal January 2020 - March 2022
ML Engineer *Kathmandu, Nepal*

· Lead handwritten based document extraction project, implemented models based object detection(FCN) and CRNN model for recognition. Also enhanced DevOps skills(docker, shell scripting).
· Improved and enhanced sub-module(resource recommendation and question difficulty prediction) of AI integrated educational platform where elastic search based resource recommendation was implemented and for question difficulty prediction various classic machine learning models(Linear Regression, Tree based models) and deep learning based models(Attention and BERT model) were tested. Regularly analysed and monitor the data and model in the system.
· Worked on Email Automation system where for email classification SVM and Xgboost model were implemented and RTE models were implemented for macros suggestion.

Johnson Care, UK July 2018 - October 2019
Junior Software Developer *Nepal*

· Involved in developing various in house system to record and analyse records.

Omdena August 2019 - September 2019
Data Wrangler

Created new features from raw satellite images for Sophisticated Tree Identification Model and also created GAN model to generate new images.

PROJECTS

Word2Vec(Skipgram) Implementation
Code

· Implemented and trained word2vec on small corpus.

Text to image synthesis(Major Project)
Code

· Created GAN model to generate plausible images from a given description.

Species classification
Code

· Implemented species classification model using transfer learning, classified sea shells and monkeys images into different species.

Transfer Learning for image classification
Code

· Analysed different state of art models for transfer learning along with handling real world data efficiently and quantization of model to efficiently deploy.

Car Price Prediction
Code

· Developed linear regression based model to predict car price and explored feature extraction and optimization .

Other Project: E-commerce site.

TECHNICAL STRENGTHS

Machine Learning	Numpy, Pandas, Pytorch, Keras, TensorFlow, scikit-learn
Data Visualisation	Seaborn, matplotlib
Web Frameworks	Django, Flask, FastApi
MLOps and Cloud Services	Docker, Kubernetes, etc.
Programming	Python
Databases	MySQL, PostgreSQL, MongoDB, Hive, Impala
Web scraping	Beautiful Soup

CERTIFICATIONS

· Microdegree in Deep Learning, Fusemachines View Certificate

· Deep Learning Specialization, Coursera, View Certificate

· Introduction to Tensorflow for Artificial Intelligence, Machine Learning and Deep Learning, Coursera, View Certificate

· Convolutional Neural Networks in Tensorflow, Coursera, View Certificate

· Sequences, Time Series and Prediction, Coursera, View Certificate

· Natural Language Processing in Tensorflow, Coursera, View Certificate

REFERENCES

Available on Request