Ishan Poudel

405-981-8094 | ishan.poudel@mavs.uta.edu | LinkedIn | Github

Education

The University of Texas at Arlington — Arlington, TX
Bachelor of Science in Computer Science — *Aug. 2020 – May 2024*

- GPA: 3.99/4.00
- Relevant Coursework: Data Structures and Algorithms, Software Engineering, Operating Systems , Object Oriented Programming

Experience

Research Assistant — May 2022 - Present
The Innovative Data Intelligence Research Laboratory — *Arlington, TX*

- Freebase is a collaborative knowledge base. Designed and contributed to a library that is used to parse the freebase data dump into a graph data set
- Developed Python and MySQL scripts for further customization such as adding and removing certain classes of nodes in the graph data and utilized D3.js for graph visualization
- Created a library that is used to convert Wikidata data in N-triples format to a SQL database that can support Natural Language Processing queries using Python and Docker
- Compiled research results and presented a demonstration to faculty and lab members

Student Researcher — Aug. 2021 – Dec. 2021
Maia Lab - Mathematics Department — *Arlington, TX*

- Created a data processing pipeline using the OpenCV library in Python for training machine learning models

Projects

Housing Price Predictor | *Python, Flask, MySQL, Docker , JavaScript , HTML* — **Github Link**

- Developed a full-stack web application that allows users to input data for housing price prediction, with the option of configuring the data set for further customization
- Implemented a web scraper that can collect housing data from a given location with Selenium and utilized multithreading for efficiency
- Built a data pipeline to clean the data using Python, developed a model to predict the housing price in a given location, and deployed the model in a flask server

Stock Sentiment | *Java, Maven, Git , Flask* — **Github Link**

- Developed a full stack mobile app that allows users to view stock prices, financial metrics, and news of any company along with the stock sentiment
- Implemented a web scraper that crawls financial news websites and updates recent stock news to a database using Selenium and beautifulSoup
- Created a machine learning classifier utilizing the Bidirectional Encoder Representations from Transformers(BERT) model to classify news as positive, negative, or neutral

Disasteye | *Java, Maven, Git , Firebase* — **Github Link**

- Collaborated with 3 other colleagues to develop a disaster viewer application that visualizes disasters across the world on an interactive interface
- Used REST API to populate disaster icons in the map and managed the database portion of the project

Tweet Classifier | *Python, Flask, Git* — **Github Link**

- Designed and deployed a Recurrent Neural Network (RNN) that allows users to type in a tweet and get the sentiment of a tweet
- Implemented two existing natural language processing models (ROBERTA model and VADER model) for users to compare the accuracy of their model

Technical Skills

Languages: Java, Python, C, SQL (MySQL), JavaScript, HTML/CSS
Frameworks: React, Next.js , Node.js, Flask , Django
Developer Tools: Git/GitHub, Docker, VS Code