Sohaib Ahmed Syed

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Education

Illinois Institute of Technology

Chicago, IL

Bachelor of Science in Computer Science, Masters of Applied Science in Data Science

Expected: May 2024

GPA: 3.91

Dean's List: Fall 2019, Fall 2020, Spring 2021, Fall 2021

Relevant Coursework:

Data Mining, Intro to AI, Probability & Statistics, Applied Statistics, Monte Carlo Methods in Finance

Work Experience

Motorola Solutions Inc., Machine Learning Intern

Schaumburg, IL

Python3, PyTorch, PyCharm, BitBucket

May 2022-Aug 2022

- Extracted stand-alone wav2vec2.0 300M parameter NLP speech model from Hugging Face
- Fine-tuned wav2vec2.0 for Voice Activity Detection tasks using linear and convolutional layers
- Developed Python scripts to train and test wav2vec2.0 model on degraded audio
- Trained model with different sized TIMIT datasets
- Produced score files during testing to allow easier analysis of data

Projects

Employee Database

Java, SQL, DBeaver, PostgreSQL, Eclipse

- Programmed an application that communicated with a PostgreSQL database that kept and updated employee information
- Implemented a SQL script that created the database used to store employee data
- Configured the database to allow certain privileges based on the application user
- Managed a team by organizing meetings and delegating tasks

Hotel Cancellation Decision Tree

R, RStudio

- Created a decision tree model to predict whether a hotel booking would be canceled using ML techniques
- Constructed confusion matrices to obtain statistical data about the model using R libraries
- Applied pruning techniques to the model in order to create a more accurate model
- Analyzed the trade off between sensitivity and specificity by plotting ROC curve

Movie Recommender System

R, RStudio

- Used a small public movie dataset to recommend a specific user 5 movies based on 10 chosen by user
- Utilized simple cosine similarity function to determine similarity score
- Manipulated datasets to score user profiles based on the watched genres of movies

Skills

Programming Languages: Python3, R, Java, SQL, C, Haskell, Bash

Tools: Visual Studio Code, PyCharm, Eclipse, DBeaver, RStudio, PostgreSQL, GitHub, BitBucket, PyTorch, Tensorflow Languages: English (Fluent), Urdu (Fluent), Spanish (Conversational)

Extracurricular

Muslim Student Association, Association for Computing Machinery at IIT, Volunteer at Sacred Learning Center