Hassan Muhammed Ahsan

Computer Engineering

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B.Tech

Examination	University	Institute	Year	CPI/%
B.Tech	IIITDM Kurnool	IIITDM Kurnool	2018 - 22	6.93

EXPERIENCE

- **Data Analytics Intern** | *PrepInsta*   *(Jan'24 - Current)*
  - **Work Done:**Real-time data is used for Exploratory Data Analysis in Python activities such as visual exploration, data profiling, and data cleansing. correlation analysis, learning new things, and seeing trends.
  - Understanding the fundamental structure and characteristics of the data is a critical stage in this process.The main goal of web scraping is to gather datasets from several websites by employing different extraction techniques. It prepares the groundwork for dashboard creation by gathering current and pertinent data from the internet.
  - **Tech Stack**: Python, SQL, Numpy, Pandas, Python Frameworks: BeautifulSoup and
- **Research Intern** | *Samsung R & D India (Samsung Prism)*   *(May'21-Nov'21)*
  - **Work Done**: Developed an Audio Source separation model for extraction of 4 different audio categories from a given audio track using TensorFlow, UNets, Auto-Encoders, and Librosa to be intergrated into a Flutter based application for Android
  - **Implementation**: Implementation: The Audio separation model which extracts the bass, drums, vocals, and other category audios from the given audio file implementing Fourier transforms .
  - **Result**: Deployed a model that generates separated audios of the above categories with a mean absolute error(MAE) of 1.3733 .
  - **Tech Stack**: TensorFlow, Python, Flutter, UNets, Auto Encoder, & Librosa

TECHNICAL SKILLS

- **Programming & Scripting Languages**: Snowflake, C, Go, Python, SQL, Oracel Databases, HTML, CSS, MS SQL*,Bash*
- **Frameworks**: OpenCV, TensorFlow, Flask, OpenFaaS, Seaborne, Beautiful Soup
- **Tools & Libraries**: Tableau, PowerBI, LATEX, Kubernetes, Docker, GIT, MySQL, Figma*, SQLite*,
- **Platforms:** Linux*, Web, Windows, MS Excel, MS Word, MS Power point
- **Soft Skills:** Leadership, Event Management, Writing, Time Management, Public Speaking

THESIS & SEMINAR

- **Traffic Aware Scaling Optimization in OpenFaaS** | *(B.Tech Project)*   *(Dec'21-May'22)*
  - **Work Done:**Proposed and Implemented a traffic aware scaling algorithm for the OpenFaaS platform for changing the static parameters during scaling
  - **Impacts:** Improved run-times and request handling for Data Science functions implemented in FaaS model in OpenFaaS framework
  - Reduced response time in the proposed design by 50% compared to time taken in Default Static Scaling implementation
  - **Tech Stack**: FaaS, PaaS, Shell Scripting, GO, Flask, Docker, & Kubernetes

COURSE PROJECTS

- **SPEECH TO TEXT CONVERSION**   *(May'21-Dec'21)*
  - **Work Done** on speech to text conversion system using **LPC**(Linear Predictive Coding), RNN, HMM, & PyDub
  - The system, implemented using a block chain on a banking server, can accept input from various sources, including video or live voice, assisting underprivileged individuals.
  - **Tech Stack**: Python, PyDub, Graphql, RNN, & HMM
- **CLASSIFICATION FOR CLOSED EYES**   *(Jan'21-Mar'21)*
  - **Work Done** for the prediction for open or closed eyes, which uses Tflite model & OpenCV.
  - **Impact:** Implemented a suitable program that recognizes and classifies the eyes of the user using a live feed.
  - **Tech Stack**: Python, Tflite, & OpenCV

* Have basic/beginner-level knowledge