Arnab Mondal

Kolkata   arnabmondal13082002@gmail.com   8001339822   in Arnab Mondal   ARNAB

Education

Vellore Institute of Technology, Vellore *July 2024– Present*
M.Sc. in Data Science
- GPA: 8.19/10.0
- **Coursework:** Statistics, Exploratory Data Analysis, AI/ML

Maulana Abul Kalam Azad University of Technology, West Bengal *Oct 2021– July 2024*
B.Sc. in Information Technology (Specialized in Data Science)
- GPA: 8.66/10.0
- **Coursework:** DBMS, DSA, AI/ML, Deep Learning

Skills

Languages: Python,C ,Java, SQL, JavaScript

Technologies: Angular, MySQL, MongoDB, Power BI, Tableau

Projects

Context-Aware Spell Checker Using NLP *(github)* *March 2024*
- Built a real-time spell checker using Levenshtein edit distance and N-gram language modeling.
- Preprocessed and tokenized text from the Brown corpus to build a vocabulary for word recognition.
- Detected and corrected misspelled words using bigram/trigram probabilities for context-aware suggestions.
- Suggested the most probable word replacements by leveraging edit distance and N-grams frequency analysis, ensuring accurate sentence correction.
- Replaced incorrect words with the most probable alternatives based on edit distance and frequency analysis.
- **Technologies Used:**Python, NLTK, NLP, Levenshtein Edit Distance, N-Grams

Desktop Voice Assistant *(github)* *September 2023*
- Developed a voice-controlled personal assistant using Python that can recognize speech, respond with text-to-speech, and perform various tasks.
- Integrated speech recognition for voice commands and pyttsx3 for text-to-speech conversion.
- Implemented Wikipedia search, web browsing, media playback, and time retrieval functionalities.
- Automated opening applications like Google, YouTube, Stack Overflow, Calculator, and IntelliJ IDEA.
- **Technologies Used:** Python, Speech Recognition, Text-to-Speech (TTS), Python

Certifications

Management Information Systems *(Certificate)* *July 2024*
- Understanding of Management Information Systems (MIS), including hardware, software, databases, networking, and strategic applications in business.
- Gained insights into information system development, security, and the societal impact of technology.

Career Essentials in Generative AI *(Certificate)* *May 2024*
- Understanding of Generative AI concepts, including AI ethics, applications, and best practices.

Web Development *(Certificate)* *Nov 2023*
- Understanding of web development concepts, including front-end and back-end technologies, coding practices, and website development.