Akshat Sahu

asahu3@stevens.edu | +1 (201) 275-7594 | linkedIn/akshat2634 | github/akshat2634

Education

Stevens Institute of Technology | *Hoboken, New Jersey* — **September 2023 — May 2025**
MS (Master of Science), Computer Science
GPA: 3.66/4

Manipal University Jaipur | *Jaipur, India* — **July 2019 — July 2023**
BE (Bachelor of Engineering), Information Technology
CGPA: 8.62/10

Skills

Programming/Markup Languages: Java, C/C++, Python, SQL, Natural Language Processing (NLP), Prompt Engineering, HTML, JSP, Servlets, TypeScript, JavaScript, CSS, JSON, XML

Frameworks and Libraries: Springboot, Spring MVC, RESTful APIs, Hibernate, Maven, Angular, Streamlit, Pandas, Numpy, Matplotlib, Sklearn

Databases and DevOps: MySQL, Git, GitHub, Jenkins

Experience

Nagarro — **March 2023 — July 2023**
Software Engineering Intern — *Gurugram, India*

- Engineered the Product Community Website, providing users with the ability to register, browse products, post reviews, and request reviews for diverse products, cultivating a dynamic and engaged user community.
- Developed backend RESTful APIs with Java Spring Boot, enabling user authentication, registration, product search, and review posting.
- Integrated Hibernate with MySQL for efficient data storage and retrieval, optimizing user information and product details management.
- Created interactive frontend interfaces using Angular, enhancing user engagement and overall experience on the Product Community Website.

Projects

SummarEase.Ai | *GitHub Link* — **December 2023 — January 2024**

- Developed SummarEase.Ai, a **document summarization** application leveraging **OpenAI's GPT-3.5 Turbo** and **GPT-4** for advanced natural language understanding.
- Incorporated **LangChain's** text processing capabilities, utilizing **RecursiveCharacterTextSplitter** for effective **document chunking** and optimizing the summarization workflow.
- Integrated **ChatOpenAI** to dynamically generate **tailored summaries** based on **custom prompts** alongside PDFs.
- Engineered an intuitive **Streamlit interface**, offering **customizable parameters** and **interactive document chunk visualization** for an enriched user experience.

Fake News Detection Using Machine Learning | *GitHub Link* — **January 2022 — April 2022**

- Implemented various machine learning algorithms to **detect fake news** from a given news corpus.
- Performed **text data preprocessing techniques (tokenization, stopword removal, TF-IDF vectorization)** on a dataset of 40,000 records (fake and authentic news articles) to transform textual information into numerical features suitable for training.
- Applied **Decision Tree, SVM, Naive Bayes, Logistic Regression**, and **Random Forest** algorithms for training and evaluating the fake news detection model.
- Achieved an overall **testing accuracy of 99.58%** with the **highest performing model** being the **Decision Tree**.

Coursework

Graduate:

- Data Structures and Algorithms, Fundamentals of Computing, Mathematical Foundations of Machine Learning

Undergraduate:

- Data Analysis and Algorithms, Database Management Systems, Automata Theory and Compiler Design, AI & Machine Learning, Deep Learning, Natural Language Processing

Publications

1. Divadkar, S., Sahu, A. & Puri, S. A Novel Approach to Ambiguous Fake News Classification through Machine Learning. *IEEE 3rd Global Conference for Advancement in Technology (GCAT)* (2022).
2. Divadkar, S., Sahu, A. & Puri, S. A Review of Ambiguous News Detection Approaches with Deep Learning, Machine Learning, and Ensemble Paradigms. *IEEE 3rd Global Conference for Advancement in Technology (GCAT)* (2022).

Achievements

- 2023,**Dean's List Excellence in Academics Certificate**, in recognition of receiving the highest grade point average in the 7th semester, Manipal University Jaipur | Link