

Muhammed Swafvan

Phagwara, Punjab 144411

📞 7034541751 ✉ mohammedswafvan859@gmail.com 🌐 <https://linkedin.com/in/muhammed-safwan-284178119>

🔗 <https://github.com/Mohammedsafwan78>

Training

Data Structures and Algorithms (DSA) Training

Jun 2024 - Aug 2024

GeeksforGeeks

- Mastered data structures, including arrays, linked lists, stacks, queues, trees, and graphs, optimizing problem-solving efficiency.
- Implemented key algorithms such as sorting, searching, hashing, and dynamic programming in **C++, Java, and Python**.
- Solved **200+ coding problems** and participated in **10+ coding contests**, refining analytical and coding skills.
- Developed **5+ DSA-based projects**, applying algorithmic techniques to real-world challenges.
- Gained proficiency in **time complexity analysis, recursion, and competitive programming**, preparing for software development roles.

Projects

Language Identification Using Machine Learning / Python, NLP, TF-IDF, SVM, Logistic Regression Jan 2024 - Feb 2024

- Built a machine learning model to classify multilingual text using **TF-IDF** and **syntactical analysis** for feature extraction.
- Trained and evaluated models including **SVM, Logistic Regression, and Random Forest**, optimizing accuracy and recall.
- Collected and preprocessed a diverse dataset from **web scraping and APIs**, ensuring balanced language representation.
- Achieved **accuracy 93 %** on test data, using **confusion matrix analysis** to enhance model performance.

News Article Recommendation Engine / Python, NLP, TF-IDF, Cosine Similarity Aug 2024 - Oct 2024

- Developed a **hybrid recommendation system** integrating **content-based filtering (TF-IDF, cosine similarity)** and **collaborative filtering** to personalize news recommendations
- Collected and processed large-scale **news article and user interaction data** from web sources for model training.
- Achieved **78% Precision and 0.85 MRR**, ensuring accurate and diverse recommendations.
- Implemented **dynamic user profile updating**, allowing real-time adaptation to evolving user preferences.

Certificates

Prompt Engineering

August 2024

Vanderbilt University — <https://coursera.org/share/7f2176012295f1b39dc29a17c9ed1b72>

Data Structures and Algorithms - Self Paced

June 2024

GeeksforGeeks — <https://www.geeksforgeeks.org/certificate/846953a84aa2171ac25bd06c1df9a22b>

Generative AI with Large Language Models

DeepLearning.AI, Amazon Web Services — <https://coursera.org/share/b0829a99ac2a63f3afec9f5489d802b7>

Technical Skills

Languages: Python, C++, Java

Technologies/Frameworks: TensorFlow, PyTorch, OpenCV, Pandas, NumPy, SciPy, Streamlit, Google Colab, Git

Skills: Machine Learning, Natural Language Processing (NLP), Data Structures & Algorithms (DSA), Model Development & Deployment, Recommendation Systems, Prompt Engineering, Problem-Solving, System Optimization

Education

Lovely Professional University Punjab

2022 – 2026

Computer Science and Engineering — CGPA: 6.68

Jalandhar, Punjab

Sacred Heart Senior Secondary School

2020 – 2021

12th Science — Percentage: 86.76%

Malappuram, Kerala

Sacred Heart Senior Secondary School

2019 – 2020

10th — Percentage: 78.32%

Malappuram, Kerala