

Akshit Kamboj

akshstkamboj1@gmail.com | LinkedIn | Website | GitHub

Skills

Languages

English | Hindi

Programming

Java | Python | C | C++ | HTML |
CSS | JavaScript | MySQL | Kotlin |
Apache Ant | YAML

Softwares

VS Code | Jupyter | MATLAB | AWS
| Android Studio | Firebase | IntelliJ
IDEA | Xcode | Tableau | Overleaf |
Azure

Deep Learning Frameworks

TensorFlow | PyTorch | Keras

Hobbies

Reading | Football | Painting

Soft Skills

Leadership | Communication |
Time Management | Teamwork

Education

Manipal University Jaipur (MUJ), Rajasthan, India

Bachelor of Technology - CGPA:
9.62 / 10

Computer Science & Engineering
July 2019 - July 2023

Suncity School, Gurugram, Haryana, India

Class XII (CBSE AISSE) - Score:
90.2%
2018 - 2019

Class X (CBSE AISSE) - CGPA: 10
2016 - 2017

UG Courses

Engineering Mathematics - I
Engineering Mathematics - II
Problem Solving Using Computers

Work Experience

Shell - Associate Data Engineer

August 2023 - Present

- Worked within the Facilities Infrastructure and Development department, responsible for developing and maintaining data pipelines to ensure accurate analytics and insights.
- Implemented data quality checks, enhancing reliability for informed decision-making.
- Collaborated cross-functionally to optimize data architecture and drive data-driven strategies.

Amazon - Software Development Engineer Intern

January 2023 - June 2023

- Worked in the Payment Acceptance and Expansion Technology team, contributing to various internal Amazon services.
- Mitigated SAS and PE Risks across various internal services.
- Created End-to-End Integration Tests for designated services.
- Executed Chaos Testing to enhance service resilience.
- Constructed a comprehensive monitoring package from scratch, enabling effective metric tracking for a given service.
- Introduced Real-Time Log Analysis capabilities to enhance service insights.
- Implemented AWS App Config for diverse use cases within specified services.

Alyog Engineers & Consultants - Data Science Intern

October 2021 - February 2022

- Analyzed monthly sales data spanning 5+ years for 1200+ automotive parts.
- Developed informative dashboards to visually present trends and patterns in the sales data.
- Employed 8 distinct Machine Learning Models to forecast future sales for individual automotive parts using historical data.
- Resulted in enhanced operational efficiency across sales, manufacturing, and distribution through accurate sales predictions.

Nittio Learn (acquired by Whatfix) - Data Science Intern

March 2021 - May 2021

- Developed a complete Course Recommendation Engine based on the given user and course data of over 8 years.
- The engine automates course suggestions based on similar user learning history, greatly reducing trainer time spent on matching courses to users.
- Developed a 98% accurate Multilayer Perceptron Model (MLP) for Multi-Label Classification, recommending multiple courses for each user.

Research Work

Detection of Malware in Downloaded Files Using Various Machine Learning Models

Published in Egyptian Informatics Journal

[View Publication](#)

Employed diverse machine-learning methods to ascertain the presence of malware within downloaded internet files. The primary focus involved analyzing distinct file

Engineering Mathematics - III
Data Communications
Computer System Architecture
Data Structures & Algorithms
Object Oriented Programming
Engineering Mathematics - IV
Operating Systems
Relational Database Management Systems
Computer Organization
Artificial Intelligence & Soft Computing
Design & Analysis of Algorithms
Automata Theory & Compiler Design
Computer Networks
Soft Computing
Hybrid Soft Computing Techniques
Software Engineering
Information Systems Security
Data Science & Machine Learning
Data Mining & Data Warehousing
User Interface Design
Digital Image Processing
Natural Language Processing
Industrial Training
Big Data Analytics
Deep Learning
Major Project

Volunteer Experience

**Youth Club Mangala, Sirsa,
Haryana, India**
(Tree Plantation NGO)

January 2022 - February 2022

Organized proper data records for all the employees as well as volunteers of the NGO, in a database. Also contributed towards the plantation of trees in various parts of the city of Sirsa.

Nirbhaya Jyoti Trust
(Women Empowerment NGO)

November 2020 - December 2020

Assisted in the proper maintenance of the NGO Website, at regular intervals. Took the initiative to educate women from the disadvantaged sections of society about the different constitutional rights they have and how they can exercise those rights.

**Shri Baba Tara Charitable Trust,
Sirsa, Haryana, India**
(Covid-19 Relief NGO)

April 2020 - July 2020

Helped in the timely maintenance of the NGO's database. Also aided in providing several basic services to underprivileged people during the COVID-19 pandemic in India in the year 2020 - 2021.

attributes such as MD5 hash, Optional Header size, and Load Configuration Size. Through this analysis, files were categorized as either malicious or benign. This approach effectively identifies malware types such as Adware, Trojan, Backdoors, Unknown, Multidrop, Rbot, Spam, and Ransomware.

Prediction of TCP Firewall Action Using Different Machine Learning Models

Accepted in IEEE MoSICom 2023

[View Publication](#)

Leveraged various machine learning models to automate TCP firewall action decisions during data transmission across multiple communication scenarios. The core concept involves examining various TCP transmission attributes, including Source Port, Destination Port, Elapsed Time (in seconds), NAT Source Port, and NAT Destination Port. Through thorough analysis of these features, the machine learning models categorize TCP firewall actions into four distinct categories: Allow, Deny, Drop, and Reset-Both.

Patient's Condition Categorization Using Drug Reviews

Under Review (ICCAIML'24)

[View Publication](#)

Categorized patients' health conditions by analyzing feedback regarding specific medications. Developed an adept system employing NLP and machine learning to classify medical conditions, leveraging diverse patient reviews to predict specific ailments. Applied multiple vectorization techniques to preprocess and analyze textual data from patient drug reviews, unveiling significant patterns and trends through a variety of machine learning classification algorithms.

Projects

New York City Taxi Fare Prediction

Guide: Prof. Shikha Mundra (Professor at Manipal University Jaipur)

February 2022

- Developed 4 different machine learning models for predicting the fare amount (including tolls) for any given taxi ride in New York City.
- Worked towards the continuous improvement of these models and finally arrived at a model with a Root Mean Square Error (RMSE) of just \$3.82.

Store Sales Prediction Using Machine Learning Models

Guide: Prof. Shikha Mundra (Professor at Manipal University Jaipur)

December 2021 - January 2022

- Worked with datasets extracted from data stores present in two different data warehouses for two given stores.
- Built 5 different machine learning models for accurately forecasting the future client demand for various items present in the stores.

Tip Prediction Using Fuzzy Logic Controller (Fuzzy Inference System)

Guide: Prof. Shikha Mundra (Professor at Manipal University Jaipur)

October 2021 - November 2021

- Assembled a complete Fuzzy Control System that models how any given person might choose to tip at a restaurant.
- The Fuzzy Controller takes in two inputs: 'Service' and 'Food Quality' and, based on these ratings, predicts the amount that can be offered as a tip.

News Right | Android Application

Guide: Dr. Sandeep Joshi (Professor at Manipal University Jaipur)

June 2021 - July 2021

- Created an application that presents the most recent news updates to the user.
- Implemented several functionalities like searching for news related to a specific topic and refreshing the news feed.
- Implemented logic (API Integrations) in Java and utilized XML for the UI.

