

EDUCATION

- **Thapar Institute of Engineering and Technology** Patiala, India
Bachelor of Engineering - Computer Science and Engineering; GPA: 7.81
Courses: DataBase Management Systems, Secure Coding, Data Structures and Algorithms, Operating Systems, Machine Learning
2020 - 2024
- **S.D Public School** Chandigarh, India
Grade XII; Percentage: 89
Grade X; Percentage: 75
2019 - 2020
2017 - 2018

SKILLS SUMMARY

- **Languages:** Python, SQL, Solidity, Unix
- **Frameworks:** Django(Beginner), Flask, Pandas, Numpy, FastAPI, Nltk
- **Tools:** MySQL, Git/Github, GetBootstrap, PowerBI
- **Platforms:** Linux, Windows, Oracle
- **Soft Skills:** Leadership, Critical Thinking, Responsible, Teamwork, Flexibility, Consistency

POSITION OF RESPONSIBILITY

- **Mudra Cultural Society** Patiala, India
Management Head
2021 - 2022
 - Organized various inter-India events with over 200+ participants:
 - Responsible for overall team management and event management.:
- **Paryawaran Society** Patiala, India
Executive Member
2022 - 2023
 - Organized various nature conserving events on campus and outside.:
 - Pitched sponsors for the events with tactical plans to promote the events.:

PROJECTS

- **Wine Quality Prediction:** Developed the machine learning model to predict wine quality using Random Forest Classifier. Used confusion matrix, accuracy, precision for validating model performance.
TECH STACK : Python, Numpy, Pandas, plotlib.
- **Railway Management System:** Designed database to tracks train timings, routes, seats, prices; records passengers, ticket types for efficient railway management.
TECH STACK : SQL.
- **Coffee Sales Dashboard:** Worked with Microsoft Excel to build a dynamic interactive coffee sales dashboard. Data is first gathered and then transformed and then pivot charts and pivot tables are used.
TECH STACK : Ms-Excel.
- **MyToDo:** Created a webpage using Python and Flask. For Html and javascript used a tool called getbootstrap. Then connected the database (sqlite) using flask-sqlAlchemy. Designed a basic structure of a webpage to list down all the upcoming tasks in day-to-day life an one place and one can also perform CRUD operation.
TECH STACK : Python, Flask, SQL
- **Sentiment Analysis:** Collected a dataset featuring some of the social media text posts along with their sentiment(0,1,2).I crafted a NLP pipeline with the precision to accurately classify these social media texts, where I used BERT the pretrained model and used nltk to pre-process the data and achived the accuracy of 80per-cent using SVC as the classifier
TECH STACK : Python,Numpy,Pandas,nltk,BERT,SVC

PUBLICATIONS

- **Conference Paper: Robust and Secure Dual Watermarking for improved protection and preservation of sensitive healthcare data(Accepted in 8th International CVIP- 2023, IIT JAMMU):** Detect image tampering, recovers using self-embedding dual watermarking, embedded using NSST, BMEMD, MSVD for enhanced imperceptibility, robustness. Publishing in **Springer** in late 2023
- **Research paper: Enhancing robustness and security of medical images through composite watermarking method:** Under Review in Soft Computing. A combination of NSST, HD, and SVD transforms, improving the robustness and security of the grayscale watermarked image embedding into multiple cover images.

CERTIFICATES

- Certificate of Internship with SmartKowner for Cyber Security
- CyberSecurity Essentials by Cisco
- Python Certificate HackerRank

ACHIEVEMENTS

- Solved 150+ programming questions among various coding platforms and won several badges.
- Honoured with best athlete as well as Gold medalist of the year at TIET.
- Zonal Football player.