Muskaan Chopra

+91-8146194184 | chopramuskaan
47@gmail.com | <u>LinkedIn</u> | <u>Portfolio</u>

EDUCATION

Chandigarh College of Engineering and TechnologyPanjab University, ChandigarhBachelor of Engineering in Computer Science | CGPA: 9.23/10Aug. 2019 – June 2023Kendriya VidyalayaChandigarhIntermediate/ Class XII CBSE | AISSCE(%): 91.8/100 (Rank 6)July. 2017 – March 2019

Work Experience

Research Intern Oct. 2021 – Present

Department of Biophysics, Panjab University, Chandigarh

• Developing Neural Network systems for peptide-protein analysis.

Junior ML Engineer

Oct. 2021 - Nov. 2021

Omdena

- Leading the ontology mapping and model pipeline-deployment tasks.
- Contributing in EDA and forecast model construction.

Data Science Intern

Sept. 2021 – Oct. 2021

HevStack

- Researched for various emotions that may exist in reviews of a product for classification.
- Scripted Scrapers in Python for Data Gathering and further analyzed it.

Machine Learning Intern

July 2021 – Present

Scanta, Inc

- Morale detection using emotion and sentiment scores.
- Pattern detection from a text using regex
- Emotion Detection using Models like T5-base fine-tuned for Emotion Recognition.
- Worked with Genism, NLPAUG & NLPStanza.

Research Intern

April 2021 – Present

Design and Innovation Centre, Panjab University

- Working on extensive feature extraction and LSTM-RNN for time series analysis.
- Worked on Predictive Maintenance for early prediction of faults in machine by thermal and Time Series analysis.
- Trained ARIMA Model & LSTM RNN on real time temperature data collected from sensors.

UI Intern

Dec 2020 - Feb 2021

Scanta, Inc

• Assisted in Developing a Javascript based Front-End with Docker Integration and a React - based UI for Bot Security

RESEARCH EXPERIENCE

Federated Learning: A new era of ML to Enhance Privacy Protection

Communicated Work

Influence and Establishment of Smart Transport in Smart Cities

Communicated Work

Impact Of AI On Manufacturing Industries And Its Future Prospects

Communicated Work

Assess and Analysis Covid-19 Immunization Process: A Data Science Approach to make India self-reliant and safe

Communicated Work

The perspective of Security and Privacy Models for Fog-enabled IoT in Smart Cities

Communicated Work, Secure Edge and Foq Computing Enabled AI for IoT and Smart Cities, Springer

Deep Learning and Statistical Models Evaluating the trends in the vaccination drive of India Communicated Work, IJHPCN, Inderscience

Deep Learning in Robotics for strengthening Industry 4.0.: Opportunities, Challenges and Future Directions $Accepted, RACCISC\ 2021$

Predicting Catastrophic events using Machine Learning models for Natural Language Processing Published, Data Mining Approaches for Big Data and Sentiment Analysis in Social Media

Role of social media in Covid-19 Pandemic: A literature review

Published, Data Mining Approaches for Big Data and Sentiment Analysis in Social Media

A comparative study of Generative Adversarial Networks for Text-to-Image synthesis

In Press, International Journal of Software Science and Computational Intelligence

An Inquisitive Prospect On The Shift Towards Online Form Of Digital Media in COVID-19 Pandemic In Press, Springer: International Conference on Advances in Data Computing, Communication and Security, 2021

An Investigative Study Into The Impact Of AI & IoT In Modern Times & Hereafter

In Press, AAP & CRC Press: Taylor & Francis Group

TECHNICAL SKILLS

Programming Languages: C, C++, Python, R

Data Science & AI: Python libraries, MS Excel, Google sheets, Power BI, Tableau, Machine Learning, Time Series

Analysis, Natural Language Processing

Web Technologies: HTML, CSS, Bootstrap, Materialize

Databases: MySQL PostgreSQL

Developer Tools: Git, Docker, Google Cloud Platform, VS Code, PyCharm

PROJECTS

Disaster Prediction Predicting disasters in tweets using NLP in Python.	$\underline{\mathrm{Visit}}$
Review Scraper Walmart Product Review Scraper using Selenium in Python.	$\underline{\text{Visit}}$
Temperature Prediction A time-series prediction project based on ARIMA.	$\underline{\text{Visit}}$
College Grievance System Maintained the Database of the Grievance system of my College in MySQL.	$\underline{\text{Visit}}$
COVID-19 TRACKER-In Angular CLI A covid-19 tracker made in Angular framework	$\underline{\mathrm{Visit}}$

Positions of Responsibility

1. Chairperson at CCET ACM Student Chapter

Scaled community to 150+ members through 25+ events including webinars, competitions and workshop focusing on developing technical and leadership skills. **Released 'CASC Magazine'** & acted as **Lead Editor** for it in academic year 2020-21.

2. Student In-charge & Coordinator

College Website Development Head, E-Cell & Training and Placement Cell.

3. Class Representative

Gained public speaking, organisation, problem-solving and negotiation skills by proactively coordinating with a class of 75 students and staff.

ACHIEVEMENTS

- Selected for Online Asian Machine Learning School 2021, ACML.
- One of the six students Selected from India for Inaugural Student Ninja Board (2021-22) for ACM IKDD
- Selected for STA Program 2021 ICMR CIBIOD, PGIMER, Chandigarh.
- Selected for short term course on **Data Analytics and Predictive Technologies** in IIT-BHU.
- Granted Scholarship for ACM MobiSys 2021 mentorship and workshops.
- Successfully completed **Ultimate Milestone** of Google Cloud Ready facilitator Program
- Successfully completed Microsoft AI Classroom Series
- Cleared Round 1 of National Level Hackathon, Game of Codes.

Extra-Curriculars

- Organized a A Five-day Faculty Development Programme by ATAL AICTE and CCET, Chandigarh on "AI with IoT"
- Organized a A four-day national webinar by technology experts on the role of technology in making India Self Reliant, by CSTT, Indian Ministry of Education.
- Designed various Posts and Brochures for Government Events in Collaboration with our college. Check Here
- 2nd Runner-Up In PICTURESQUE, A B-Roll Making Competition by Photography club of College.