MUSKAAN CHOPRA

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EDUCATION

Chandigarh College of Engineering and Technology　　　　　　Panjab University, Chandigarh
Bachelor of Engineering in Computer Science | CGPA: 9.23/10　　　　　　Aug. 2019 – June 2023
- College Website Development Head, Executive Member Training and Placement Cell.
- **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. Delivered and hosted various workshops on ML, Designing.
- Class Representative- Gained **public speaking, organisation, problem-solving and negotiation skills** by proactively coordinating with a class of 75 students and staff.

Kendriya Vidyalaya　　　　　　Chandigarh
Intermediate/ Class XII CBSE | AISSCE(%): 91.8/100 (Rank 6)　　　　　　July. 2017 – March 2019

WORK EXPERIENCE

SDE Intern　　　　　　Dec. 2021 – Jan. 2022
BlazOp
- Built MongoDB Integration Adaptor for CRUD Operations

Research Intern　　　　　　Oct. 2021 – Present
Department of Biophysics, Panjab University, Chandigarh
- Developing Neural Network systems for peptide-protein analysis.

Data Science Intern　　　　　　Sept. 2021 – Oct. 2021
HeyStack
- 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 – Dec. 2021
Scanta, Inc
- Worked on 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
- Worked on Predictive Maintenance for early prediction of faults in machine by thermal and Time Series analysis using ARIMA Model & LSTM RNN on real time temperature data collected from sensors.

UI Intern　　　　　　Dec 2020 – Feb 2021
Scanta, Inc
- Assisted in Developing the Front-End with Docker Integration UI for Bot Security

RESEARCH EXPERIENCE

Analysis & Prognosis of Sustainable Development Goals using Big Data-based Approach during COVID-19 Pandemic
Communicated Work, Sustainable Technology and Entrepreneurship, Elsevier

Federated Learning: A new era of ML to Enhance Privacy Protection
Communicated Work, Cognitive and Intelligent Systems for IoT and Cyber-Physical Systems, 2021

Influence and Establishment of Smart Transport in Smart Cities
Published, CEUR-WS.org, SysCom 2021

Impact Of AI On Manufacturing Industries And Its Future Prospects
Published, CEUR-WS.org, SysCom 2021

Assess and Analysis Covid-19 Immunization Process: A Data Science Approach to make India self-reliant and safe
Published, CEUR-WS.org, SysCom 2021

The perspective of Security and Privacy Models for Fog-enabled IoT in Smart Cities
Accepted, Secure Edge and Fog Computing Enabled AI for IoT and Smart Cities, Springer

Evaluating the sustainable COVID-19 vaccination framework of India using Recurrent Neural Networks
Communicated Work, Wireless Personal Communications, Springer

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
<u>*Published*</u>*, Data Mining Approaches for Big Data and Sentiment Analysis in Social Media*

Role of social media in Covid-19 Pandemic: A literature review
<u>*Published*</u>*, Data Mining Approaches for Big Data and Sentiment Analysis in Social Media*

A study on detection of COVID from chest X-rays using Convolutional neural network
In Press, Volume 14, Issue 1, Article 19, International Journal of Software Science and Computational Intelligence

A comparative study of Generative Adversarial Networks for Text-to-Image synthesis
In Press, Volume 14, Issue 1, Article 14, International Journal of Software Science and Computational Intelligence

An Inquisitive Prospect On The Shift Towards Online Media in COVID-19 Pandemic
In Press, International Conference on Advances in Data Computing, Communication and Security, 2021
doi- 10.1007/978-981-16-8403-6_20

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, MongoDB
Developer Tools: Git, Docker, Google Cloud Platform, VS Code, PyCharm
Certifications: Deep Learning and Neural Networks, AI for Everyone, Basics of Angular, Python, Google cloud training, Frontend Fundamentals. <u>Visit</u>

PROJECTS

To Do App | Flask To Do App with MongoDB. <u>Visit</u>
Job Recommender | Streamlit Job Recommender App with MongoDB. <u>Visit</u>
Space-Dashboard | Space Company Data visualization dashboard in Tableau. <u>Visit</u>
Covid-Dashboard | Covid-19 Data visualization dashboard in Tableau. <u>Visit</u>
Disaster Prediction | Predicting disasters in tweets using NLP in Python. <u>Visit</u>
Review Scraper | Walmart Product Review Scraper using Selenium in Python. <u>Visit</u>
Temperature Prediction | A time-series prediction project based on ARIMA. <u>Visit</u>
COVID-19 TRACKER-In Angular CLI | *A covid-19 tracker made in Angular framework* <u>Visit</u>

ACHIEVEMENTS

- Secured rank 4 out of 760 teams in Future Hack- Quizotica by IIT Delhi
- Secured second position in Unicode Machine Learning Summer Course 2021 project evaluation. **Check Here**
- 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 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**

EXTRA-CURRICULARS

- Feature Editor @ **XRDS, ACM**
- Community Mentor @ **Yocket**
- 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.
- Delivered **Seminar, on "AI, ML and IoT** in National Language", as a part of A **four-day national webinar** on the role of technology in making India Self Reliant, by **CSTT, Indian Ministry of Education**.