

## Work Experience

### Data Scientist

ShareChat, India

[July 2021 - Present]

#### Trust & Safety Team (TnS)

- Spearheading the TnS DS team, implementing scalable DS models for real-time NSFW content moderation across visual, audio, and text platforms, handling 100M+ daily interactions on Moj from 200M+ users.
- Drove a 55% moderation cost reduction across key tools by pioneering industry-leading MLOps practices, including advanced user behavior analytics, feature engineering, predictive analytics, anomaly detection, layered content filtration, and automated ML pipelines.
- Attained a 30% increase in precision and an annual saving of 5 crore INR.

#### Content and User Understanding Team

- Contributed to the Moj recommendation team by fusing semantic and user features into candidate generators for 5B posts and 200M users, boosting feed relevance and leading to a 2% increase in Daily Active Users (DAU).
- Conducted an in-depth analysis and development of feature embeddings and classification models for extensive UGC data. This involved meticulous feature engineering, user modeling, and content comprehension, all aimed at refining the precision of our analytical frameworks.

### Undergraduate Researcher

Vision Language and Learning Group, IIT Jodhpur

[Dec 2019 - May 2021]

- Developed an optimization framework using meta learning paradigm by finding the optimal solutions for identifying consistent unseen relationships in a bag of images, outputting paired bounding boxes across an image set.
- Due to the NP-Hard complexity of finding the optimal solution, adopted a greedy inference algorithm to select approximately the best solution in realtime. Achieved state-of-the-art accuracy of 84.07% on VrR-VG dataset.
- Paper published at esteemed ICCV conference as a first author for this work.

### Software Engineer Intern

MathWorks, India

[May 2020 - July 2020]

- Designed and developed an autonomous Feature Based Testing Seg-v analyzer tool from scratch to be used by 1000+ MathWorks Community.

### Research Intern

IIT Delhi, India

[May 2019 - July 2019]

- Innovated a wearable device in collaboration with team MAVI, IIT Delhi for the task of vision and communication for visually impaired people.
- Enabled functionalities like Speech Recognition, Object Detection, Depth Estimation, Face Recognition, OCR, Image Captioning, and Video Calling. Increased the average precision of the animal detection model by 25%.

## Research Publications

### 3MASSIV: multilingual, multimodal and multi-aspect dataset of social media short videos

Conference on Computer Vision and Pattern Recognition (CVPR)

[2022]

### Few-Shot Visual Relationship Co-Localization

International Conference on Computer Vision (ICCV)

[2021]

### Propagation and asymmetric behavior of optical pulses through time dynamic loss-gain assisted media

Applied Optics

[2018]

## Technical Skills

### Programming Languages

Python (proficient), C, C++, JavaScript

### Artificial Intelligence

PyTorch, TorchServe, DVC, Pandas  
Vertex AI, Airflow, OpenAI Gym  
CUDA, LangChain, NLTK, ROS

### Devops and Cloud

Google Cloud, CI/CD pipeline, Jenkins  
Kubernetes, Docker, Grafana, Spinnaker

### Databases

BigQuery, MySQL, Redis

### Development

Git, Conda, Superset, Jira, React  
Jupyter Notebooks, Django

## Education

### B.Tech in Computer Science and Engineering

Indian Institute of Technology, Jodhpur  
CGPA : 8.5/10 | 2021

### Higher Secondary (CBSE)

Dr. VSEC School

Percentage : 95.0% | 2016

## Self projects

Epidemic Spread in a contact network

Wearable device for visually impaired

GrabCut++: Audio-guided Interactive Image Segmentation

Glowing in the dark: Converting extremely low light scenes to daylight

Mesh-merize: A neural network based approach for indoor localization

Inter college collaboration portal

## Honors and Awards

Director's prize for the best academic innovation work among students of B.Tech, IIT J of the class of 2021

Teaching assistant for data structure and practices course offered to M.Tech, IIT J

President of the automation club of IIT J

Gold medal and Bronze medal in Inter IIT Tech meet for campus sustainability and route optimization algorithm respectively

Winner at CodeFunDo held by Microsoft