

EDUCATION

École Polytechnique	Sept 2025 – Present
Masters of Science and Technology in Trustworthy and Responsible AI	Paris, France
Courses(MS): Machine Learning, Deep Learning, Computer Vision, Collaborative Learning, Optimization for AI, Reinforcement Learning	
Birla Institute of Technology And Science (BITS), Pilani	Aug 2017 – Aug 2021
Bachelors of Engineering in Computer Science	Pilani, India

WORK EXPERIENCE

Georgia Institute of Technology   Research Intern	Atlanta, Georgia   May 2024 – Sep 2025
<ul style="list-style-type: none"><li><b>VideoConviction:</b> Built a multimodal benchmark (288 videos, 6K+ annotations, 457 h) to study conviction cues in financial advice, benchmarking transformer-based MLLMs (Gemini 2.5, GPT-4o, Qwen 2.5).</li><li><b>FinCap:</b> Developed a short-form financial video captioning benchmark (624 clips, 7 modality setups, 5 tasks), benchmarking modality fusion strategies for recommendation, visual features, sentiment, and entity extraction.</li></ul>	
Urban Company   Software Developer 2 (Promoted in 2023)	Bangalore, India   Aug 2021 – Mar 2025
<ul style="list-style-type: none"><li><b>Product Catalog Cache:</b> Designed a distributed cache datastore for 27K products across 5 countries using Kafka, Redis, and MongoDB; reduced service latency by 40% and supported recommendation pipelines.</li><li><b>Dynamic Pricing Framework:</b> Deployed SARIMA + XGBoost-based time-series models for adaptive pricing by demand and region, improving revenue by 4% on \$80M+ transactions.</li></ul>	
IIIT Delhi   Research Intern	New Delhi, India   Jan 2021 – June 2021
<ul style="list-style-type: none"><li><b>Author Profiling:</b> Modeled authorship patterns in scientific publications using GNNs (GNN-XML) and AnnexML (KNN) on the S2ORC corpus (600K papers, 160K authors), achieving P@1: 23%, P@3: 15%.</li></ul>	
Bridge Your Network   Software Engineering Intern	Dublin, Ireland   Jan 2021 – June 2021
<ul style="list-style-type: none"><li><b>App Development:</b> Built React interfaces and Ruby on Rails APIs for a networking platform (40M+ users), enhancing profile features and backend reliability.</li></ul>	

SELECTED PUBLICATIONS AND THESIS

VideoConviction: A Multimodal Benchmark for Human Conviction and Stock Market Recommendations	
Oral Presentation @ Datasets and Benchmarks Track, KDD 2025	[KDD'25]
FinCap: Topic-Aligned Captions for Short-Form Financial YouTube Videos	
Poster Presentation @ Short Video Understanding Workshop, ICCV 2025.	[ICCV'25]

SELECTED PROJECTS

- Multimodal RAG:** Building a vision-based RAG system for scientific papers using PaliGemma-3B with equation-aware retrieval to improve accuracy on math-heavy queries over traditional OCR baselines. *(Present)*
- Multimodal Emotion Recognition:** Built a real-time pipeline (OpenCV + DeepFace + Whisper + PyTorch) that fuses facial, speech-tone, and text-sentiment modalities for live emotion inference.
- Bias Detection and Mitigation Framework:** Built a fairness evaluation pipeline using IBM AIF360 and scikit-learn to reduce gender bias; applied reweighting and impact removal, improving fairness metrics by 40%.

KEY ACCOMPLISHMENTS AND EXPERIENCES

- Charpak Masters Scholarship:** 56 selected / 2500+ applicants – French Ministry of Europe & Foreign Affairs.
- Competitive Programming:** Rank 4 and 6 in codechef long challenge Sept'22 and Oct'22 (10K participants).

SKILLS

Programming Languages	Python, C++, Javascript, C
Frameworks/Libraries	PyTorch, TensorFlow, Hugging Face, scikit-learn, NumPy, Pandas
AI/ML Areas	Multimodal Learning, LLMs, VLMs, Transformers, Diffusion Models, NLP, RAG
Tools	Git, Docker, Snowflake, MySQL, Kafka, Redis, MongoDB, AWS