

EDUCATION

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

WORK EXPERIENCE

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| Georgia Institute of Technology Research Intern | Atlanta, Georgia May 2024 – Sep 2025 |
| • VideoConviction: 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). | |
| • FinCap: 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. | |
| Urban Company Software Developer 2 (Promoted in 2023) | Bangalore, India Aug 2021 – Mar 2025 |
| • Product Catalog Cache: 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. | |
| • Dynamic Pricing Framework: Deployed SARIMA + XGBoost-based time-series models for adaptive pricing by demand and region, improving revenue by 4% on \$80M+ transactions. | |
| IIT Delhi Research Intern | New Delhi, India Jan 2021 – June 2021 |
| • Author Profiling: 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%. | |
| Bridge Your Network Software Engineering Intern | Dublin, Ireland Jan 2021 – June 2021 |
| • App Development: Built React interfaces and Ruby on Rails APIs for a networking platform (40M+ users), enhancing profile features and backend reliability. | |

SELECTED PUBLICATIONS AND THESIS

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| • 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

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| • 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. (<i>Present</i>) |
| • 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

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| • 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

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| 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 |