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SCHOLASTIC ACHIEVEMENTS

- Secured **All India Rank 1698** in **JEE Main** among 1.15 million aspirants, showcasing exceptional aptitude *(2021)*
- Earned **All India Rank 1395** in **JEE Advanced** out of 0.25 million candidates, proving strong merit *(2021)*
- Cleared stage 1 of **NTSE** scholarship by NCERT, Government of India, a notable academic milestone *(2019)*

PROFESSIONAL EXPERIENCE

Railway Cabin CCTV AI Monitoring System - AUGMEN.IO / INDIAN RAILWAYS *January 25 - April 25*
Developed a multi-model AI system for real-time pilot alertness detection from cabin CCTV footage.
- Achieved 90% accuracy using CNN-LSTM, YOLOv8-Pose, and Transformer fusion; deployed in 50+ locomotives.
- Reduced micro-sleep false positives by 30% via AI-based Transformer filtering, improving reliability.
- Cut latency by 50% using deep learning ONNX optimization and multiprocessing for real-time alert generation.

ASVA AI — Resume Intelligence System *May 24 - July 24*
Built an intelligent resume parsing system using document AI models for automated candidate profiling.
- Fine-tuned Faster R-CNN to extract structural elements from resumes, boosting document segmentation accuracy.
- Achieved 95% accuracy in section classification using LayoutLM for domain-specific resume parsing.
- Integrated feature extraction pipeline for key candidate attributes, improving ATS scoring and recruiter filtering speed.

Supply Chain Intern — Eris Lifesciences Ltd *June 24 - July 24*
Part of the Supply Chain team managing end-to-end planning for Anti-Diabetes & Cardiovascular products
- Cut stockholding by 5% and save 10% in costs through inventory optimization and KPI-driven supply chain analytics.
- Improved forecasting accuracy by 10% for 15+ pharmaceutical SKUs using cross-functional sales and production data.
- Streamlined S&OP planning by aligning cross-functional inputs, improving pharmaceutical demand forecasting efficiency.

RESEARCH

EGD Optimizer — Research Paper in Progress *ongoing*
Designed a novel optimizer to accelerate deep learning training using adaptive gradient strategies.
- Achieved 15% faster convergence than Adam on 5 benchmark datasets via dynamic learning rate and perturbation updates.
- Reduced training time by 20% for 3 CNNs on non-convex problems by solving against RMSProp with tuned parameters.

KEY PROJECTS

Multi-Agent AI Scientist System of multiple agents — Self-Project *Ongoing*
- Built an LLM-powered multi-agent AI research system automating 80% of the academic workflow via Gemini API.
- Developed 7 autonomous collaborative LLM agents, improving research efficiency by 50% across 10 projects.
- Generated 5 peer-reviewed reproducible research papers with code and datasets, leveraging Gemini for validation.

VideoGPT — Independent Research Project *May 24 - July 24*
- Generated notes from 1.5hr videos in 2 mins using keyframe extraction and RRDB-enhanced vision-language embeddings.
- Cut inference latency by 30% vs GPT-4o via a custom multimodal LLM pipeline with optimized loaders and light attention.

Language Translation – Using Transformers — Course Project *Nov'23 – Feb'24*
Guide: Prof. Amit Sethi *IIT Bombay*
- Built a GPT-based translation model with 95% accuracy on 10 multilingual NLP pairs using transformer encoder-decoder .
- Improved model generalization by 10% via ReLU-based feed-forward layers and normalization on complex language datasets.

POSITIONS OF RESPONSIBILITY

Sports Head — Aavhan, IIT Bombay *June 23 - March 24*
Part of the organizing team for the IIT Bombay flagship intercollegiate sports festival.
- Hosted a 2-day national chess tournament with 400+ participants by securing Grandmaster sponsorship and logistics.
- Handled 167k prize distribution across 20 winners by streamlining financial tracking and vendor coordination.

TECHNICAL SKILLS AND EXTRA-CURRICULARS

Programming & Tools	Python, C++, Java, Bash, Prolog, HTML, CSS, JavaScript, Django, Git, LaTeX, ROS, Gazebo, Android Studio, SolidWorks, AutoCAD
Data Science	PyTorch, TensorFlow, NumPy, OpenCV, R, R Studio, MATLAB/GNU Octave
Sports	Represented Maharashtra in **Shot Put** at the **National Games** and IIT Bombay in the **Inter-IIT Sports Meet** after institute-level selections.
Miscellaneous	Completed NCC training at IIT Bombay; practiced 0.22 rifle at Colaba Firing Range. Built Bluetooth RC bot, optimized RC plane, and pitched an agro-tourism startup at EnB Buzz 2022.