

EDUCATION

Masters in Computer Science , Machine Learning (specialization) Georgia Institute of Technology (Atlanta, GA)	Aug 2024-Dec 2026 GPA: - 4.0/4.0
Bachelor of Technology (B.Tech) , Information Technology (specialization) Maharaja Surajmal Institute of Technology (GGSIPU) (New Delhi, India)	2016-2020 CGPA:- 3.52/4.0

TECHNICAL SKILLSET

Pre Modelling:	NumPy, Pandas, Scikit-learn, Plotly, Matplotlib, Seaborn, OpenCV, NLTK, SpaCy
Modelling:	PyTorch, TensorFlow, Hugging Face (Transformers / Diffusers), LangChain, LangGraph,
Inference:	MLflow, ONNX Runtime, OpenVINO, Weights & Biases, Model Quantization & Optimization
Systems:	Python, Go, SQL, Bash, Docker, ElasticSearch, Azure, ML Security, Pentesting, RabbitMQ, Multiprocessing, Git, Distributed Training

RESEARCH EXPERIENCE

Which VLM , CS 8803 SAI (Dr. Anand Iyer)	Aug 2025- Present
Designing an adaptive semantic router that directs multimodal (text, image, audio) queries to the most efficient VLM/LLM using budget-aware and retrieval-augmented routing; expected to cut inference cost by ~30%.	
Edge Glass Assistant , CS 8803 VLM and LLM (Dr. Zsolt Kira and Dr. Alan Ritter)	Aug 2025- Present
Developing a lightweight, privacy-preserving multimodal assistant using frozen encoders and quantized projectors for on-device inference; targeting 2× faster runtime with minimal accuracy loss	
Connectivity ML Threshold , Fortinet Research; (PCT/172022/958026)	Jun 2021- Nov 2022
Co-authored a patent on modeling optimal wireless connectivity thresholds across enterprise devices using unsupervised ML, reducing manual troubleshooting work by over 75% .	
Ontology-based Text Classification , Undergrad Research (Dr. Sonika Malik)	Aug 2019- May 2020
Developed an ontology-driven text classification model using DOID, improving accuracy by 10% and F1 by 6% over classical ML methods; published in CEUR Workshop Proceedings (Vol. 2786)	

WORK EXPERIENCE

Fortinet (AIOps, R&D) , Bengaluru	
Software Development Engineer 2	Feb 2024 - July 2025
<ul style="list-style-type: none">Built an Agentic RAG-based enterprise diagnostics chatbot (top-5 at Fortinet Hackathon 2023) integrating LLMs, tool-calling, and telemetry signals to reduce network issue-resolution time by ~70%.Deployed edge-optimized ML models via ONNX, lowering inference latency by 40% across distributed FortiGate devices	
Software Development Engineer 1	Feb 2021 - Feb 2024
<ul style="list-style-type: none">Redesigned OpenSearch ingestion architecture, scaling throughput from ~50 to over 2,000 events/sec for production ML workloads.Implemented unsupervised SD-WAN anomaly detection using DBSCAN, preventing over 50% of potential outages across enterprise networks.	

PROJECTS

github.com/Vedaang-Chopra

nlp-work ; cv-work	Author	A collection of projects, learning material related to CV and NLP .
neural-malware-shield	Co-Author	A comparison study of DL architectures (CNN, GNN, RNN, etc.) on Malnet.
ATHENA	Author	A modular multi-agent AI framework combining for content creation(CS 8903)