

SUMMARY

Computer Science graduate with a Master’s degree from Northeastern University, specializing in Data Science, Machine Learning, and AI. Experienced in developing predictive models, conducting statistical analysis and deploying ML solutions using Python, SQL, TensorFlow, PyTorch, and scikit-learn. Hands-on experience with end-to-end data pipelines, API development (FastAPI, Flask), and cloud platforms (AWS, GCP) gained through internships and academic projects.

EDUCATION

Northeastern University, Boston, MA	Sep 2024 – Present
Master of Science in Computer Science	
Relevant Coursework: Algorithms, Machine Learning, Essentials of Data Science, DBMS, Cloud Computing, Web Development	
Anna University, Chennai, India	Aug 2020 – May 2024
Bachelor of Engineering in Computer Science and Engineering	

TECHNICAL SKILLS

Programming Languages:	Python, SQL, C, R, Bash, Java
ML and NLP:	Scikit-learn, TensorFlow, PyTorch, Keras, SpaCy, CNNs, A/B Testing
Statistical Methods:	Hypothesis Testing, Statistical Modeling, Experiment Design, Probability Distributions
Data Engineering & APIs:	Apache Spark, Airflow, FastAPI, Flask, REST APIs, PostgreSQL, MongoDB, MySQL
AI & LLM Tools:	OpenAI APIs, Hugging Face Transformers, LangChain, Prompt Engineering
Analysis / Visualization:	Pandas, NumPy, Matplotlib, Seaborn, Plotly, Tableau, Power BI, Excel
Cloud & DevOps:	Docker, Git, AWS (S3, SageMaker, Lambda, EC2), GCP, Terraform, GitHub Actions, Postman

WORK EXPERIENCE

Khoury College of Computer Sciences, Boston Graduate Teaching Assistant	Sep 2025 – Present
<ul style="list-style-type: none">Mentored students in object-oriented programming, software design patterns, and Java development through interactive lab sessions and hands-on coding exercises.Conducted code reviews and provided debugging assistance to improve students’ programming logic, code structure, and software design quality.Guided students in applying unit testing, version control, and collaborative development practices to build scalable, maintainable software systems.Supported students during office hours with design decisions, debugging, and conceptual understanding of advanced OOP principles and design patterns.	
Brainvault Technologies, India Software Developer	Jan 2024 – Jun 2024
<ul style="list-style-type: none">Designed and developed an AI-powered travel assistant for TravelNet Solutions using Python, OpenAI APIs, Hugging Face Transformers, FastAPI, MySQL, BeautifulSoup, and Nominatim API, automating itinerary creation, location mapping, and surprise trip suggestions.Delivered features that reduced travel planning time by 80–90% while enhancing client engagement, demonstrating direct business impact.Implemented end-to-end LLM-based extraction workflows with Gemini, LLaMA, and PDFPlumber, achieving 90–95% field-level accuracy and significantly reducing manual data processing.Collaborated cross-functionally with product, design, and engineering teams to scope, prototype, and deploy AI-powered tools, ensuring reliability, scalability, and operational efficiency.Leveraged infrastructure automation and production deployment practices to streamline internal workflows and accelerate solution rollout.	
Waycool Food and Products Pvt. Ltd, India Machine Learning Engineer	Sep 2022 – Dec 2022
<ul style="list-style-type: none">Designed and implemented a CNN-based computer vision pipeline to automatically identify, count, and measure grain sizes, improving accuracy to 85–90% and significantly enhancing consistency over traditional methods.Optimized model performance through advanced feature extraction, adaptive thresholding, and custom preprocessing, reducing computational time by 85% while maintaining high precision.Conducted data preprocessing, statistical validation, and performance benchmarking, transforming raw vision data into actionable insights for quality control and process improvement.Collaborated with senior data scientists, iteratively refining the model and pipeline, and earned top performance scores and a commendation for quality, impact, and technical rigor.Gained practical expertise in computer vision, deep learning, and model optimization, demonstrating readiness to apply ML solutions in production and real-world environments.	

PROJECTS

AI-Driven Financial Risk Management System GitHub Repo	Sep 2025 – Dec 2025
<ul style="list-style-type: none">Built an end-to-end credit risk prediction pipeline processing 30K financial records, achieving ROC-AUC of 0.78–0.82 through ensemble modeling and enabling automated risk stratification for lending decision support.Applied SMOTE for class imbalance handling and conducted feature importance analysis to identify key default predictors, improving model recall by 15% and providing actionable insights for risk assessment strategies.Built an ensemble stacked model combining multiple classifiers, achieving 81.9% accuracy and generating interpretable AI-powered risk explanations for transparent decision-making in financial workflows.	
Online Purchase Intent Prediction GitHub Repo	Sep 2025 – Dec 2025
<ul style="list-style-type: none">Designed and deployed machine learning system predicting e-commerce customer purchase probability with 86.5% accuracy, enabling data-driven marketing interventions with projected 15-20% reduction in cart abandonmentImplemented intelligent risk assessment engine analyzing browsing behavior (page views, bounce rates, engagement metrics) to generate real-time actionable recommendations with confidence scoring and intervention timing optimizationCreated comprehensive analytics dashboard with live performance monitoring, model comparison visualizations, and prediction history tracking; integrated 3 ML models with ensemble methodology for robust predictions	
Predictive Modeling for Loan and Insurance Cost Estimation GitHub Repo	Sep 2023 – Dec 2023
<ul style="list-style-type: none">Developed predictive analytics solutions for automated loan eligibility assessment and insurance premium estimation, improving forecast accuracy by 10% (loans) and 8% (insurance) to optimize underwriting and pricing strategies.Conducted feature importance analysis, hypothesis testing, and A/B scenario simulations to optimize risk assessment and pricing strategies, delivering data-driven recommendations for business decision-making.Applied statistical validation and model evaluation techniques (cross-validation, ROC curves, confusion matrices) to ensure robust, actionable insights for underwriting and premium calculation.	