BADAL GUPTA

1400 Washington Ave, Albany, NY 12222 | +1 (518) 699-2479
badal.gupta0408@gmail.com | linkedin.com/in/badal-gupta04 | github.com/Cloudyboiii

Data Science graduate student with comprehensive expertise spanning machine learning, data analysis, and software development. Published researcher with proven track record in developing ML models, statistical analysis, and data-driven solutions across healthcare and business domains. Demonstrated success in end-to-end project implementation, from data processing to production deployment. Seeking Summer 2025 internship opportunities in Machine Learning, Data Science, or Analytics to leverage strong technical foundation and research experience in driving data-powered innovations. Particularly interested in roles involving predictive modeling, data analytics, machine learning engineering, or business intelligence.

EDUCATION

Master of Science in Data Sciences
University at Albany (SUNY Albany) | Expected December 2026

Bachelor of Technology in Computer Science and Engineering
Indus University, India | GPA: 9.30/10 | April 2024

TECHNICAL SKILLS

Programming & Development
- Languages: Python (Expert), R, Java, C++, SQL
- Web Technologies: HTML, CSS, JavaScript, REST APIs
- Database: MySQL, PostgreSQL, MongoDB
- Version Control: Git, GitHub

Machine Learning & AI
- Frameworks: TensorFlow, PyTorch, Keras
- Libraries: Scikit-learn, NLTK, XGBoost
- Areas: Deep Learning, NLP, Computer Vision
- MLOps: MLflow, Docker, Model Deployment

Data Science & Analytics
- Analysis: NumPy, Pandas, SciPy
- Visualization: Matplotlib, Seaborn, Plotly
- Statistics: Hypothesis Testing, A/B Testing
- BI Tools: Tableau, Power BI

Development Tools
- IDEs: VS Code, PyCharm, Jupyter Notebook
- Cloud: AWS, Google Cloud Platform
- Containers: Docker, Kubernetes
- CI/CD: Jenkins, GitHub Actions

RELEVANT COURSEWORK

Machine Learning & AI
- Advanced Machine Learning
- Deep Learning Systems
- Natural Language Processing
- Computer Vision
- Neural Networks

Data Science
- Statistical Learning
- Big Data Analytics
- Data Mining
- Predictive Modeling
- Time Series Analysis

Computer Science
- Data Structures & Algorithms
- Operating Systems
- Database Management
- Software Engineering
- System Design

PROFESSIONAL EXPERIENCE

Machine Learning Research Intern | Indus University
June 2022 - February 2024
- Led development of ML models for heart failure prediction achieving 92% accuracy using ensemble methods
- Published research findings in Web of Science indexed journal and presented at university conference
- Developed end-to-end ML pipeline processing 100,000+ medical records with automated feature engineering
- Implemented model optimization techniques resulting in 45% reduction in inference time

Data Analyst Intern | Towa Pharma Pvt. Ltd.
June 2023 - July 2023
- Engineered ML models for employee attrition prediction achieving 5% reduction in turnover
- Developed data processing pipelines handling 50,000+ employee records across 20+ departments
- Created automated reporting system reducing analysis time by 75% using Python and SQL
- Identified key attrition factors leading to implementation of retention strategies saving $200,000+ annually

PROJECTS

Story Generation from Multiple Images using NLP
- Developed ML pipeline integrating BLIP and Falcon models for image understanding and text generation
- Built full-stack web application using Anvil framework with custom API endpoints
- Implemented robust error handling and optimization for production deployment

Spotify Song Popularity Predictor
- Engineered ML system with 89% prediction accuracy using ensemble learning (Random Forest + XGBoost)
- Reduced model inference time by 45% through optimized feature engineering pipeline
- Processed 100,000+ song records with 40+ features for comprehensive analysis

Valorant Matchmaking Simulator
- Developed matchmaking algorithm processing 10,000+ player profiles with 95% accuracy in skill-based matching
- Improved player satisfaction by 40% through implementation of balanced team composition algorithm
- Reduced matchmaking time by 60% while maintaining quality through optimized player pool management
- Built scalable system handling 1000+ concurrent users across 5 different game modes

HR Analytics and Attrition Prediction Platform
- Built end-to-end ML pipeline for employee attrition prediction using Python and scikit-learn
- Performed advanced feature engineering and selection to identify key attrition indicators
- Developed interactive dashboards using Jupyter and Plotly for real-time HR analytics
- Implemented automated reporting system for tracking model performance and attrition trends

Cardiovascular Disease Prediction System
- Created ML models achieving 90%+ accuracy in early detection of cardiovascular diseases
- Implemented multiple classifiers (Random Forest, XGBoost, SVM) for optimal prediction
- Developed interactive dashboards for real-time model performance monitoring

PUBLICATIONS

"Prediction of Heart Failure using Machine Learning Algorithms"
Indian Journal of Natural Sciences (Web of Science Scopus Journal), February 2024

"A Comparative Review of Machine Learning Techniques for Predicting Used Car Prices"
International Journal of Research and Analytical Reviews (Impact Factor: 7.17), October 2023

CERTIFICATIONS

- BCG Data Science Job Simulation - Forge
- AWS Natural Language Processing
- Foundation: Data, Data, Everywhere - Google/Coursera
- Machine Learning Using Python - Indus University
- Python 3 Ultimate Guide - Udemy

ADDITIONAL SKILLS

Languages
- English (Professional Working)
- Hindi (Native)
- Gujarati (Native)

Soft Skills
- Project Leadership & Team Collaboration
- Technical Documentation & Communication
- Problem-Solving & Critical Thinking
- Agile & Scrum Methodologies

PERSONAL ACHIEVEMENTS

Academic Excellence
- Maintained 9.30/10 GPA throughout undergraduate studies
- Rank 3rd at 18th SOF National Science Olympiad
- Rank 2nd at 9th SOF International Mathematics Olympiad

Competitive Achievements
- Runner-up in University E-Sports Tournament (Rocket League)
- Runner-up in University E-Sports Tournament (Valorant)
- State level Chess Championship Participation