# Abhilasha Jain

Boston, MA | (617) 331-5768 | <u>abhilasha1125jain@gmail.com</u> | <u>LinkedIn</u> | <u>GitHub</u> | <u>Portfolio</u> Available Immediately | Open to Relocation

#### **SUMMARY**

Accomplished Data Scientist with **3+ years** of experience in leading cross-functional teams to design, build, and deploy ML/NLP models and services. Proficient in Python, SQL, and various machine learning, Computer Vision, and NLP techniques with a strong track record of delivering data-driven solutions to complex business problems.

#### **WORK EXPERIENCE**

## AI/ML Intern, SPG America, Piscataway, NJ

Iul 2023 - Present

- Developed ETL pipeline using Python, SQL, and Azure, automating data processing and improved precision by 25%.
- Enhanced **customer satisfaction by 13%** through implementation of GenAI on an Online Price Negotiator chatbot.
- Optimized expense tracking accuracy by 12% by creating shopping bill parser with OCR, NER & fine-tuning LILT Model.
- Improved traffic efficiency & safety with Computer Vision and NLP based algorithm for traffic management.
- To boost revenue generation, currently developing an LLM-based Bank Products Recommendation System.

### Data Science Researcher, Northeastern University, Boston, MA

Feb 2022 – Jun 2023

- Credit Card Fraud Detection using Transaction Data: Enhanced security & trust by contributing to Machine Learning solutions for Fraud Detection. Assisted in data preprocessing & optimization to improve fraud detection accuracy.
- Analyzing Banking Trends: Enhanced understanding of regional economic trends and financial systems by analyzing customer transactions, utilizing Python, and SQL.
- Prudential Life Insurance Risk Prediction: Supported client risk assessment by applying linear algebra techniques and achieved 98% accuracy.
- E-Commerce Reviews Sentiment Analysis: Collaborated on sentiment analysis of E-Commerce Reviews using NLP techniques, to enhance customer satisfaction and loyalty.

### Data Science Researcher, Zeta Surgical, Boston, MA

Nov 2021 – Dec 2021

- Reduced **75% of misdiagnoses** by integrating Machine Learning algorithms into surgical equipment.
- Supported the training of CNN and U-Net models for precise CT Scan hemorrhage with **accuracy of 63% and 92%** for classification and segmentation respectively.

## Data Scientist Product Manager, WEOrg, Mumbai, India

Sep 2016 – Jul 2019

- Spearheaded Google Cloud-based patient monitoring, resulting in a **40% faster response rate** and real-time emergency alerts using ARM KL57z, GSM and ESP.
- Elevated **25% healthcare efficiency** by conceptualizing and overseeing the deployment of a Raspberry Pi-Python gamification tool, utilizing Tableau for real-time data aggregation and analysis.
- Achieved **20% increase** in early detection of Diabetic Retinopathy by deploying a CNN-based model on fundus images.
- Increased sales by 41% through the creation of an innovative product that gained market share in the industry.
- Mentored and guided team members, fostering a collaborative and innovative work environment.
- Led cross-functional teams in the development and deployment of data-driven solutions.

#### Machine Learning Engineer Intern, IIT – Bombay, India

Aug 2018 - May 2019

- Deployed Flask based Rest API for real time Machine Learning workflow, reducing model deployment time by 30%.
- Implemented Random Forest based- predictive algorithms, improving accuracy by 20% in heart attack predictions.
- Communicated insights for the development of Medical Devices by performing **Market & Risk Analysis** of Stroke and Heart-Attack.

#### **TECHNICAL SKILLS**

**Languages:** Python, SQL, R, C/C++, MATLAB, SAS, PyTorch, Tensorflow, Keras, OpenCV, NLTK, Transformer, ITK, Linux **Database/Tools:** Excel, Tableau, Power BI, Pandas, Numpy, Scikit, SQL Server, NoSQL, Git, Azure, Docker

**Statistics:** A/B Testing, Causal Inference, Multivariate Testing, Non-Parametric tests, Survival Analysis, Probability, RNA Sequential Analysis, Bayesian Inference, Markov Chain, Monte Carlo Simulation

**Machine Learning:** Regression, Clustering, Classification, Neural Network, Statistical Modeling, SVMs, Naive Bayes, Ensemble Models, PCA, Computer Vision, GenAI, ML Ops, NLP, OCR, Object Detection, DL, Digital Image & Signal Processing **Parallel Processing:** ETL, Google Cloud Platform(GCP), Amazon Web Services (AWS), High Performance Computing (HPC)

#### **EDUCATION**

Northeastern University, Boston, MA

Master of Science in Applied Mathematics - Data Science Track, GPA: 3.5

Sep 2021 – May 2023