# SIMARDEEP SINGH MEHTA

📞 +1-934-222-8000 ✉ sm11377@nyu.edu 🔗 linkedin.com/in/simarnyu ⭘ github.com/simarmehta

## TECHNICAL SKILLS

**Languages**: Python, Java, C++, C#, HTML/CSS, NodeJS, MySQL, Dart, Shell, React, Django, JavaScript
**Frameworks**: Pytorch, Scikit, TensorFlow, Keras, OpenCV, Flask, MongoDB, DynamoDB, PostgreSQL, MapReduce
**Libraries**: NumPy, Pandas, Matplotlib, NLTK, HuggingFace, Spacy, Seaborn
**Tools**: AWS, GCP, Helm, Kafka, Snowflake, Git, Terraform, Spark, Docker, Kubernetes, Linux, DevOps

## EXPERIENCE

**American Institute for Research**                                    May 2024 – August 2024
*MLOps Intern*                                                             *New York, USA*

- Spearheaded an internal MLOps project using Flask, ChromaDB, Haystack, and AzureOpenAI to develop a Retrieval Augmented Generation-based folder system, optimizing document management and retrieval processes for internal company use, enhancing operational efficiency by over 25%.
- Collaborated with the development and IT teams to identify and resolve bottlenecks, documented processes for reproducibility, and implemented GitHub Actions to automate CI/CD pipelines, reducing deployment times by 20%.
- Managed Kubernetes deployments using Helm charts, contributed to the maintenance of a comprehensive application and stakeholder database, and authored automated test scripts with Selenium to ensure application integrity and accuracy.

**Ernst & Young (EY)**                                                  June 2022 – August 2022
*Data Science Intern*                                                      *Gurugram, India*

- Led AWS-powered cloud architecture projects, enhancing data storage and management, achieving a 30% faster data processing by implementing a data pipeline.
- Conducted analytics on large datasets with Python and SQL, significantly enhancing data quality and insights.
- Refined and cleansed data in Excel, correcting outliers and missing values. Incorporated a tool for automated data analysis, data visualization, and data mining, ensuring compliance with data quality standards.
- Evaluated and improved SAP software outputs against client requirements, increasing system reliability and performance.

**OnePercent Software LLC**                                            April 2022 – June 2022
*Software Engineering Intern*                                              *Bengaluru, India*

- Collaborated with a cross-functional Machine Learning team to implement single-player game logic, achieving a 30% uplift in user engagement and retention leading to revenue generation of about $150k.
- Designed and programmed UI and backend for mobile app/games, enhancing workflow by incorporating advanced features for stateful interactions that boosted visibility and user engagement by 20%.
- Contributed to the Unit testing phase, fixed bugs and errors through version control and documentation, employing agile practices which resulted in a 15% increase in efficiency and user satisfaction.

## EDUCATION

**New York University**                                               September 2023 – May 2025
*M.S. Computer Science; GPA: 4.0/4.0*                                      *Brooklyn, New York*

**Amity University, Uttar Pradesh**                                     July 2019 – June 2023
*Bachelors in Computer Science; GPA: 3.77/4.0*                             *Noida, India*

## PROJECTS

**EaTexas - Food Delivery App** | *AWS Lex, SageMaker, Location Service*                **Project Code**

- Pioneered a multimodal NLP and photo-based food delivery web app, enhancing user experience by providing custom dish recommendations through a machine learning model hosted through AWS Lex, AWS Location Service, and Amazon SageMaker.
- Orchestrated a secure AWS infrastructure featuring Cognito, DynamoDB, and RDS, bolstering user trust through seamless authentication and data management.
- Optimized order fulfillment with a conversational AI chatbot, supported by 35 AWS Lambda and SQS, accelerating the ordering process by 20%.

**FashionGPT - Product Recommendation System** | *CNN, ResNet50, VGG16*                **Project Code**

- Developed an end-to-end AI-driven fashion recommendation engine utilizing CNNs with ResNet50 and VGG16 models, improving product match accuracy by 30%.
- Automated data collection for over 100,000 items using BeautifulSoup, reducing manual data entry workload by 70%.
- Deployed the system on Azure integrating CI/CD pipelines for automated deployment and testing, ensuring robust scalability, and achieving a 99.9% uptime, catering to 5k+ daily user queries.

## HONORS & AWARDS

AWS Academy Graduate and Practitioner - AWS Academy Cloud Foundations. Issued on 09/28/2021.

*"Unraveling Information about Deep Learning."* (IRJET), Vol. 09, Issue 11, November 2022.