# Rishabh Shah

Durham, NC, USA | +1 (919) 638-2693 | rishabh.shah@duke.edu |
https://www.linkedin.com/in/rishabhshah133/ | Github | Website

## Work Experience

**Duke University**                                                                                      Durham, NC, USA
Duke Innovation Co-Lab Student Developer                                          *October 2023 - Present*
- Leading the development of the Chatbot module for the extension project of Nurse Hackathon
- Working to integrate LLMs like LLama, Falcon, and Mistral into low-latency systems, aiming to enhance their effectiveness and optimize for resource-constrained applications.

**Duke University**                                                                                      Durham, NC, USA
Graduate Research Assistant - Bergin Group                                        *October 2023 - Present*
- Analyzed data from remote sensors in Kenya, developed a data pipeline, and created calibration methods to ensure consistent sensor readings in the same environment.
- Working towards investigating the impact of pollution on human health using Oura ring data, and analyzing factors such as SpO2, stress levels, and heart rate

**IBM**                                                                                                       Banglore, India
Data Scientist                                                                         *September 2020 - August 2023*
- Contributed to platform deployment and reporting for the Global Azure Team, utilizing Machine Learning and Azure Cloud expertise. Specialized in IBM's Content Intelligence platform for document intelligence.
- Developed a Table detection Model(Computer Vision) and Similarity Search for Automatic Document Content Validation & processing ~100K Documents leading to 50% cost savings ($200-300 K per year) in the Manual Audit. Used Python, BERT, and Camelot for the same.
- Developed a module for document meta-data extraction and hierarchy generation of connecting documents
- Enhanced IBM's Content Intelligence platform by developing document classification and custom key-value pair extraction modules, while optimizing end-to-end document processing.
- Used Azure Form recognizer to modify CI to analyze invoices and extract Key-Value Pairs.
- Deployed end-to-end CI platform for clients on Azure Kubernetes Service using Terraform & Jenkins.
- Participated in IBM Neuro-symbolic Data Scientist Collaboration for research in Neuro-symbolic AI where PyTorch was used extensively

**IBM**                                                                                                    Bangalore, India
Data Scientist Intern                                                                       *January 2020 - June 2020*
- Made rule-based classification model, LSTM model, etc., for classification of different types of clauses
- Proposed and built two clause segregation approaches: Combined Random Forests with concrete features and other one utilized computer vision techniques.

**Prescience Decision Solutions**                                                              Banglore, India
Machine Learning Intern                                                                     *June 2019 - July 2019*
- Contributed to the development of a PDF document search module for an intelligent search platform, leveraging ElasticSearch and applying retrieval techniques such as TF-IDF and BM25.
- Used Transformers like BERT, XLnet for passage rankings

## Education

**Duke University**                                                                                      Durham, NC, USA
Master of Engineering in Artificial Intelligence                                  *August 2023 - May 2025*
***Relevant coursework:*** *Sourcing Data for Analytics, Modeling Process & Algorithms, Reinforcement Learning, Deep Learning Applications, Applied Computer Vision, Operationalizing AI (MLOps)*

**NIIT University**                                                                      Neemrana, Rajasthan, India
Bachelors of Technology in Computer Science with minors in Artificial Intelligence     *August 2016 - August 2020*
***Relevant coursework:*** *Machine Learning, Deep Learning, Artificial Intelligence, Computer Vision, Natural Language Processing, Operating Systems, Algorithms and Data Structures, C++, Python, Information Retrieval, etc*

## Technical Skills

**Languages:** Python, Java | **Database:** MySQL, MongoDB, Redis, Azure Blob, Minio **Development:** CI/CD, Azure Pipelines, Jenkins, Terraform, Kubernetes, Docker | **Libraries:** Keras, Tensorflow, Pandas, Numpy, PyTorch, Pandas | **Cloud:** Microsoft Azure, AWS | Web Scraping using Beautiful Soup | **Search:** ElasticSearch