

# Nimra Idris Siddiqui

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## EXPERIENCE

### AI/ML Intern | ElementOne, Piscataway, NJ

June 2023- Feb 2024

- Designed and developed a personalized AI-powered chatbot resulting in a 38% increase in customer satisfaction by providing instant results, eliminating delays.
- Boosted customer engagement by 10%, tailoring services to specific ethnic and faith-related preferences, effectively addressing the unique needs of diverse customers.
- Implemented advanced Natural Language Processing (NLP) techniques, achieving a 25% improvement in chatbot accuracy and responsiveness.
- Collaborated with stakeholders and team members to align chatbot functionalities with unique customer management and data needs, fostering synergy and efficient workflow.

### Graduate Assistant | Department of Computer Science, Youngstown, OH

Jan 2022 – Present

- Initiated the project by collecting data, recognizing the absence of available resources online. Went beyond expectations by sourcing student data, modifying, and generating a substantial dataset crucial for project development.
- Developed "Dr. Lego," website an innovative AI tutor, utilizing advanced deep learning algorithms to analyze and evaluate code. Resulted in a significant 30% reduction in SPIKE Prime coding errors and provided immediate student support. Leveraged the Ohio Supercomputer for efficient model training, ensuring optimal performance.
- Implemented a code quality scoring system to evaluate student work, fostering a positive coding culture and driving a 16% increase in student engagement and skill enhancement.
- Increased the efficacy of the 'Self-Driving Car System' project by 93% through C# and Unity modifications. Adapted A\* algorithms to maintain autonomous vehicles within the simulated environment continuously, preventing congestion without the need for spawning.

### Summer Internship | University of Malaysia.

June 2019 – July 2019

- Implemented innovative artificial jellyfish search algorithm to eliminate lower-order harmonics in Cascaded H Bridge multilevel inverter, boosting efficiency by 18% for integration into Photovoltaic (PV) systems. Achieved a notable 18% increase in inverter efficiency, specifically tailored for integration into Photovoltaic (PV) systems.
- Utilized MATLAB to develop algorithm, reducing switching losses, validated through simulations and experiments, with significant impact on inverter efficiency and renewable energy applications.

## SKILLS/CERTIFICATION

**Programming Languages:** C#, Python, R, Java, SQL, JavaScript (JS), React, SAS, C, C++, MATLAB

**Tools/Frameworks:** JIRA, GitHub, Power BI, Spotfire, Tableau, Snowflake

**Excel Skills:** V-lookups, pivot tables, charting, and graphing

**Certifications:** Post Graduate Program in Artificial Intelligence and Machine Learning, AWS Certified Cloud Practitioner from Udemy

## EDUCATION

Youngstown State University

**Master of Science, Computer Science**

**GPA: 4.0/4.0**

Aligarh Muslim University

**Bachelor of Science, Electrical**

**GPA: 4.0/4.0**

## PUBLICATION

- [Artificial Jellyfish Search Algorithm-Based Selective Harmonic Elimination in a Cascaded H-Bridge Multilevel Inverter](#)
- [Performance Evaluation of Multilevel DC-AC Converter To Interface EV Battery For V2H Application](#)

## PROJECTS

### Multiple Disease Prediction App

- Accomplished the development of a user-friendly and accurate app for predicting the risk of developing multiple diseases, making it accessible to users online. Collected extensive data from Kaggle to ensure accurate results, meticulously filtering and cleaning the data to train the model effectively.
- The app has garnered significant user engagement, with over **1000+ users utilizing its** features. Achieved 82% accuracy in predicting heart disease. Attained 87% accuracy in predicting Parkinson's disease. Secured 78% accuracy in predicting diabetes.

### Business intelligence to optimize costs for a restaurant

- Collaborated with a cross-functional team to implement a Business Intelligence solution for a restaurant chain, resulting in a noteworthy 12% increase in profitability and cost reduction through comprehensive data analysis.
- Demonstrated effective teamwork by efficiently distributing tasks, taking proactive actions, maintaining regular communication, and conducting daily check-ins to ensure smooth progress. Additionally, examined and meticulously filtered/cleaned data, contributing to precise decision-making.

### Breast Cancer Classification with Neural Network:

- Worked independently to develop a deep learning model for classifying breast cancer using mammogram images.
- Designed and implemented a convolutional neural network (CNN) architecture using Python and popular deep learning libraries like Keras and TensorFlow to classify mammogram images as benign or malignant.