Nimra Idris Siddiqui

Email | Outlook | Cell: 330.881.2753 | LinkedIn | GitHub | Personal Website

OBJECTIVE

As a highly motivated and results-driven student pursuing a degree in computer science, I am seeking a challenging internship in the field of software development or IT-related field. I am looking to join a collaborative and innovative team that values fresh thinking and embraces new ideas. With a solid understanding of OOP principles, MVC design patterns, SQL/NoSQL DBs, Linux, IPC and process scheduling, and networking protocols TCP/IP, I am eager to further develop my skills and gain experience in full-stack Java software development. Additionally, I am proficient in programming languages such as C, C++, Java, Python, and associated libraries, as well as cloud networking protocols. I am fully comfortable working in a hybrid (virtual and face-to-face) environment. As an active leader on campus who strives to make a positive impact on the world, I am confident that I can contribute to your organization's success while furthering my own personal and professional development.

SKILLS

·Proficient in Java, C#, Python, C++, and JavaScript
·Experience with Git and Agile methodology
·Familiarity with databases such as MySQL
·Excellent communication skills, both written and verbal
·Ability to work collaboratively in a team
·Attention to detail and ability to meet deadlines
·Strong problem-solving and critical thinking skills
·**AWS Certified Cloud Practitioner from Udemy**

WORK EXPERIENCE

Graduate Assistant | Department of Computer Science, Youngstown, OH, USA **Sept 2022 – Present**

·To design and develop an accessible computing curriculum for students with autism spectrum disorders
·To implement the computing curriculum at local middle school(s)
·To improve the learning experience and give proper access to everyone in computer science education.

Graduate Assistant | Department of Electrical Engineering, Youngstown, OH, USA **Jan 2022 – March 2022**

·Working in the Digital Circuit lab as a teaching assistant and doing project on analog device to control it with Keil software
·Managing all the operations and departments software (MATLAB, LogiISIM, ModelSim).

Summer Internship | University of Malaysia. **June 2019 – July 2019**

·Designed assembly and product component models using CATIA V5 design software.
·Executed in the Power Electronics and Renewable Energy Laboratory under the valuable guidance & supervision of Professor DR SAAD MEKHILEF.

Key Tech Stack – CATIA V5, AutoCAD, Tecplot (CFD simulation), ANSYS (Fluent), MS Office, DSP, DSO

EDUCATION

Master's in computer science **GPA: 4.0/4.0** **Expected Graduation: Dec 2023**
Youngstown State University, Youngstown, Ohio, USA

Bachelor of Technology in Engineering **GPA: 4.0/4.0** **Undergrad: Aug 2021**
Aligarh Muslim University, Aligarh, UP, India

PUBLICATION

·**Artificial Jellyfish Search Algorithm-Based Selective Harmonic Elimination in a Cascaded H-Bridge Multilevel Inverter.**
https://www.mdpi.com/2079-9292/10/19/2402 **MDPI Publication**: Selective harmonic elimination in a Cascade H-Bridge Multilevel Inverter (CHB-MLI) by using new Metaheuristic optimization algorithms that is inspired by the behaviour of jellyfish in the ocean.

· **Performance Evaluation of Multilevel DC-AC Converter To Interface EV Battery For V2H Application.**
https://ieeexplore.ieee.org/document/9654685 **IEEE North America Power Symposium Texas A & M**: Two SCMLI topologies have been studied for V2H applications.

PROJECTS

·**Business intelligence to optimize costs for a restaurant:**

https://rpubs.com/aniketsingh01/restaurantBIupdated

Collaborated with a cross-functional team to implement a Business Intelligence solution for a restaurant chain, with the goal of optimizing costs and improving profitability.

Responsibilities:

·Worked closely with the team to identify key performance indicators (KPIs) and data sources relevant to the restaurant industry.
·Designed and developed a data warehouse to store and integrate data from various sources, including POS systems, inventory management tools, and financial reporting software.
·Conducted data analysis to identify trends and patterns in sales, inventory, and operational costs.
·Created dashboards and reports to visualize KPIs, identify areas of improvement, and track progress towards performance goals.
·Collaborated with the operations team to develop recommendations and implement solutions to optimize costs, such as adjusting inventory levels, reducing waste, and optimizing staffing levels.

·**Self-Driving Car System using C# and Unity**

The self-driving car system using C# and Unity will provide a valuable tool for developing and testing autonomous vehicle technology. The system's advanced algorithms keep autonomous vehicles within a simulated environment at all times without spawning and re-spawning them, and distribute them evenly to avoid congestion and it improve the A* algorithm to take into account traffic congestion between the next node/cell and the destination, by modifying the heuristic function used in the algorithm.

• **Multiple disease prediction webapp**
https://nimrausa-public-multiple-di-multiple-diesease-prediction-tnr77l.streamlitapp.com/
Develop a web application that predicts the likelihood of multiple diseases based on a patient's symptoms and medical history, using machine learning algorithms.
Responsibilities:
·Worked closely with the team to define project scope, develop project plans, and allocate resources.
·Conducted extensive research to identify relevant datasets and machine learning algorithms for predicting multiple diseases.
·Developed a machine learning pipeline to preprocess data, train models, and make predictions using Python and popular machine learning libraries.
·Conducted extensive testing to ensure the accuracy and robustness of the machine learning models and the web application.
·Worked closely with stakeholders to gather feedback and improve the web application over multiple iterations.
·Deployed the web application on cloud-based infrastructure to ensure scalability and reliability.

·**Breast Cancer Classification with Neural Network**:
Worked independently to develop a deep learning model for classifying breast cancer using mammogram images.
Responsibilities:
·Conducted research to understand the current state-of-the-art techniques for breast cancer classification using mammogram images.
·Collected and preprocessed mammogram images from publicly available datasets to be used for training and testing the deep learning model.
·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.
·Trained and fine-tuned the CNN model using transfer learning techniques and hyperparameter tuning to achieve high accuracy and generalization.
·Evaluated the performance of the model using various metrics like accuracy, precision, recall, F1-score, and AUC-ROC.

• **Customer Segmentation using K-Means Clustering:** Build the Customer Segmentation system using K-Means Clustering.

• **MNIST Handwritten digit classification using deep learning:**
Independently developed a deep learning model to accurately classify handwritten digits from the MNIST dataset.
Responsibilities:
·Conducted research to understand the state-of-the-art techniques for image classification using deep learning.
·Preprocessed the MNIST dataset and split it into training, validation, and test sets.
·Designed and implemented a convolutional neural network (CNN) architecture using Python and deep learning libraries like TensorFlow and Keras to classify handwritten digits.
·Trained and fine-tuned the CNN model using various techniques such as data augmentation, dropout regularization, and hyperparameter tuning to achieve high accuracy.

• **Credit Card Fraud Detection using Machine Learning in Python:** Build a Credit card Fraud Detection system using Machine Learning with Python by using the Logistic Regression model.