
With a background in Computer Science and the hands-on experience of running a small online clothing business, I've become increasingly curious about how technology and business can work together to solve meaningful problems. I'm a keen observer and fast learner, currently exploring ASP.NET to gain practical backend knowledge and build secured systems. As a fresh graduate, I'm eager to step into the real world, learn from experienced teams, and contribute to work that creates real impact.

Education

North South University | Bachelor of Science in Computer Science and Engineering

2020-2024

- Awarded Merit Based Financial Aid (7th semester onward)

Academic Projects

Database Learning and Evaluation System (DB-LES)

Fall 2024

Technologies: HTML, PHP, CSS, MySQL, SQL, XAMPP, JavaScript

- Developed a full-stack academic interactive platform enabling teachers to upload problem banks, students to submit solutions, and teachers to provide feedback and grades.
- Built dedicated role-based panels for students, teachers, and admins to manage interactions and system functionality.
- Designed a robust relational database using strong and weak entities, generalization, ternary relationships, and various cardinalities (1:1, 1:N, M:N); implemented full CRUD operations and a responsive UI with JavaScript for seamless interaction and mobile compatibility.

Autism Spectrum Disorder Detection - Machine Learning Project

Spring 2024

Technologies: Python, Scikit-learn, Tableau, LaTeX

- Built and evaluated multiple machine learning models including Logistic Regression, Random Forest, XGBoost, and SVM to detect Autism Spectrum Disorder, using two diagnostic instruments: SRS and Q-CHAT-10.
- Conducted comparative performance analysis to determine which diagnostic tool offers more reliable ASD detection — introducing a novel perspective in model-based diagnostic evaluation.

Comparative Analysis of CNN for Deep Learning and Machine Learning Models for Effective Animal Image Classification - A combination of Machine Learning & Deep Learning

Spring 2024

Technologies: EfficientNet B7, TensorFlow, Python, Keras, CNN for DL, ML models

- Conducted a comparative analysis of CNN and machine learning models for animal image classification.
- Utilized a custom dataset of 106 species, comprising over 10,000 animal images.
- Developed a web application using the model with the highest accuracy (CNN) to classify animals from Aardvark to Zebra.

Image Caption Generator - Deep Learning Project

Spring 2024

Technologies: VGG16, LSTM, Python, TensorFlow

- Developed an image captioning system combining computer vision and natural language processing to generate descriptive captions for images.
- Trained the model on a wide range of images to improve accuracy and generate contextually relevant captions, utilizing deep learning techniques for both image recognition and language generation.

Temperature and humidity monitoring system using sensor

Fall 2023

Technologies: STM32F103C8T6, DHT11 Sensor, 16x2 LCD, LED, Buzzer, STM32CubeIDE

- Built an embedded system using the STM32 microcontroller to monitor temperature and humidity in real time.
- Integrated DHT11 sensor for data input, with LCD display output and visual (LED) and auditory (buzzer) alerts based on threshold levels.

- Programmed and tested the system using STM32CubeIDE, focusing on microcontroller interfacing, sensor integration, and embedded control logic.

GoMental - a Mental Health Support App

Spring 2023

Technologies: Java, XML, SQLite, Android Studio, Google Cloud

- Developed an Android-based mental health support app offering appointment booking with psychiatrists, access to a mental health helpline (call/text), online medicine purchases, and diagnostic report scheduling.
- Designed and integrated a role-based system (User, Admin, Professional) with secure login, real-time data handling via SQLite, and a streamlined UI for mobile. Implemented appointment conflict checks and dynamic order summaries to enhance usability and accessibility.

WeeklyBazar - A Web-Based Grocery Shopping Platform

Spring 2023

Technologies: HTML, CSS, Python, SQLite3, JavaScript, Django

- Developed a full-stack web platform enabling users to pre-schedule their weekly grocery orders for timely delivery.
- Integrated a weekly planner that allows users to manage shopping lists and product orders efficiently, improving user experience and planning flexibility.

Bookstagram - A web-platform for Book Enthusiasts

Summer 2022

Technologies: HTML, PHP, CSS, MySQL, SQL, XAMPP, JavaScript, Bootstrap

- Built a full-stack web platform for book lovers with user/admin login, personalized profiles, book reviews, and e-library features.
- Designed a relational database and implemented SQL queries for dynamic data handling and admin insights.

Skills

Technical Skills:

Languages: Python, Java, C, C++, C#

Full-Stack Development: HTML, CSS, JavaScript, PHP, Django, SQL, MySQL, Firebase, ASP.NET

Frameworks & Tools: Git, Android Studio, Canva Pro, Figma, Tableau, Microsoft Office Suite

AI/ML: Machine Learning algorithms, Deep Learning (CNN), Prompt Engineering Basics

Soft Skills:

Teamwork, Time Management, Creativity, Problem Solving, Adaptability, Attention to Detail, Communication