Nurul Amin Khondoker

House 14, Sector 11, Uttara, Dhaka-1230
Phone: +8801312944845
Email: nurulaminkh33@gmail.com

Education:

- **B.Sc. in Computer Science & Engineering** *2024 - Present*
  American International University – Bangladesh
  Current CGPA: 4.00
- **Higher Secondary Certificate** *2021 - 2022*
  Akij Foundation School and College
  GPA: 4.42
- **Secondary School Certificate** *2019 - 2020*
  Akij Foundation School and College
  GPA: 4.89

Courses

- **Machine Learning & AI with Python (Harvard University)**
  - Learn foundational concepts in machine learning and AI.
  - Explore Python libraries and frameworks for building machine learning models.
  - Understand algorithms for supervised and unsupervised learning.
- **Full Stack Application Development Project (IBM)**
  - Develop full-stack applications, covering both front-end and back-end technologies.
  - Gain hands-on experience with building web applications.
  - Learn to integrate databases, server-side logic, and front-end interfaces.
- **Data Analysis: Statistical Modelling & Computation in Applications (MIT)**
  - Master statistical modeling and computation techniques.
  - Analyze data with a focus on real-world applications.
  - Learn tools for data analysis and model development in Python.
- **IoT System Design: Software & Hardware Integration (Waseda University)**
  - Explore the integration of hardware and software in Internet of Things (IoT) systems.
  - Learn to design IoT solutions, including sensors and actuators.
  - Gain experience in both the software and hardware aspects of IoT projects.
- **CS50's Web Programming with Python & JavaScript (Harvard University)**
  - Learn web development using Python and JavaScript.
  - Gain expertise in HTML, CSS, and dynamic web applications.
  - Build practical web projects and understand the basics of web frameworks.
- **Backend Application Development with Node.js & Express (IBM)**
  - Learn backend development with Node.js and Express.js.
  - Build server-side applications and APIs.
  - Work with databases and understand the full backend development lifecycle.

Projects:

- **Portfolio Website**
  Designed and developed a responsive personal portfolio website to showcase skills and projects using HTML, CSS and JavaScript. I implemented a clean user interface and ensured a professional presentation.
- **BMI Calculator**
  Built a dynamic web-based BMI (Body Mass Index) calculator to analyze health metrics. The tool features a user-friendly interface where users input their height and weight to calculate BMI in real-time. It classifies results into categories such as underweight, normal, overweight, and obese, providing instant feedback for users. This project was developed using HTML, CSS, and JavaScript.
- **Python-Based Image Manipulation Tool**
  Developed an image manipulation tool using Python and the Pillow library, allowing users to perform essential tasks like resizing images and converting between formats such as PNG, JPEG, and BMP. The application is designed to be efficient and user-friendly, demonstrating a practical understanding of Python programming and image processing techniques.
- **BTC Rate Analyzer**
  Developed a BTC (Bitcoin) Rate Analyzer to track and analyze real-time fluctuations in Bitcoin prices. The project features data visualization tools to present trends and patterns in a user-friendly format. It includes functionalities for setting alerts based on price thresholds and comparing historical data for decision-making insights. This project demonstrates expertise in working with APIs, data processing, and creating dynamic user interfaces.
- **Vehicle ID Checker**
  Developed a Python-based car number plate checker that verifies the validity of vehicle registration plates with real-time data verification. The tool ensures accurate and secure identification by cross-referencing registration details, providing a reliable solution for validating vehicle information. This project highlights skills in Python programming, real-time data handling, and secure data validation.
- **Data Sorting System**
  Developed a Python-based advanced data sorting system to efficiently organize and arrange large datasets with precision. The tool leverages optimized sorting algorithms to enhance data accessibility and streamline workflow processes. This project showcases proficiency in Python programming, algorithm design, and effective data management.
- **Fuel Monitor**
  Developed a Python-based advanced Fuel Gauge Monitor to provide real-time, accurate tracking of fuel levels in vehicles. The system enhances fuel management by delivering precise data insights, enabling users to optimize vehicle performance and ensure efficient usage. This project demonstrates expertise in Python programming, real-time data handling, and the development of practical monitoring systems.
- **The Probability Puzzle**
  Developed a Python-based Probability Puzzle, an engaging game designed to challenge players with complex scenarios that require applying probability principles. This project offers a fun and educational experience, enhancing logical thinking and decision-making skills. It showcases expertise in Python programming and the ability to create interactive and thought-provoking games.

Skills

- **Hard Skills**
  - HTML
  - CSS
  - JavaScript
  - Java
  - C
  - C++
  - Web Development
  - Software Development
  - Data Analysis & Machine Learning
  - Backend Development
  - Embedded System Programming
- Soft Skills
  - Leadership
  - Problem Solving
  - Creativity
  - Communication
  - Adaptability
  - Time Management
  - Self-Motivation
  - Attention to detail
  - Analytical Thinking
  - Teamwork and Collaboration
  - Technical Versatility