Hasin Md. Daiyan

•+880 1533 376565   •daiyanhasin07@gmail.com   • linkedin/HasinDaiyan   • github/daiyanHasin

RESEARCH INTERESTS

I am enthusiastic about advancing artificial intelligence through my research interests in language models, machine learning. My focus lies in optimizing language models for enhanced natural language processing, understanding, and generation. Additionally, I am dedicated to the intersection of AI and cybersecurity, aiming to contribute to the development of secure and robust AI systems

EDUCATION

Ahsanullah University of Science Technology   Expected May-2025
B.Sc. in Computer Science and Engineering   CGPA: 3.61/4.0
Engineering University School and College   2020
HSC   GPA: 5/5

PROJECTS

Analyzing the Relationship Between Renewable Energy Generation and Weather Conditions | 2024
- **Technologies:** LSTM, HMM, TensorFlow, Python
- Explored the effect of weather variables on renewable energy output using regression analysis.

Object Detection from Satellite Images | 2024
- **Technologies:** YOLOv5, Fast R-CNN, PyTorch, Python
- Trained object detection models (YOLOv5, Fast R-CNN) on satellite imagery with COCO-format annotations.

Geospatial and Temporal Analysis of NYC Taxi Trip Data | 2025
- **Technologies:** PySpark, Python, Hadoop
- Analyzed large-scale NYC taxi data for geospatial and temporal patterns using PySpark and distributed computing.
- Engineered features (trip duration, distance) and visualized trends with Matplotlib and Seaborn.

Bengali Sentiment Analysis | 2024
- **Technologies:** CNN, LSTM
- Designed a deep learning model to classify Bengali text sentiment, leveraging NLP techniques for accuracy.

Koineze | *Personal Finance Manager*   2024
- **Technologies:** HTML, CSS, PHP, MySQL
- Built a web-based app to track income, expenses, and budgets with data visualization and user authentication.

Image Classification with CNN | 2023
- **Technologies:** Python, TensorFlow, Keras
- Developed a CNN model for classifying images from datasets like MNIST.

Betachat | *Chatting Application*   2022
- **Technologies:** Java
- Created a real-time chat app with features like secure user authentication.

Daliesque | *Art Gallery Management System*   2023
- **Technologies:** Java, MySQL
- Developed a desktop app to manage artwork, artist profiles, and gallery sales with CRUD operations.
- Optimized database queries to enhance application performance.

TECHNICAL SKILLS

- **Programming:** Python, Deep Learning (DL), Machine Learning (ML), C, C++, Java
- **Web Development:** HTML, CSS, PHP
- **Databases:** MySQL, MSSQL
- **Design Tools:** Canva, PowerPoint
- **Other Tools:** Microsoft Office Suite, Google Workspace, Git/GitHub

COURSES

- **Neural Networks and Deep Learning** by Andrew Ng (Coursera)
- **UI/UX Design Tutorial: Wireframe, Mockup and Design in Figma** by freeCodeCamp
- **Introduction to Machine Learning** by Kaggle
- **Git and GitHub for Beginners** by freeCodeCamp

EXPERIENCE

Right Time Ltd. | Aug 2021 - Jun 2023
- **Internship in Cybersecurity**
- Gained hands-on experience in identifying and mitigating cybersecurity threats.
- Assisted in conducting security audits and implementing network security protocols.
- Collaborated with the IT team to enhance system defenses and safeguard sensitive information.

British Council, Bangladesh | May 2024 - Present
- **Invigilator**
- Ensured the smooth and fair execution of examinations in accordance with British Council regulations.
- Monitored candidates during exams, maintaining a strict adherence to security protocols.
- Assisted in pre-exam setup and post-exam documentation processes.

RESEARCH

Using Stable Diffusion Model for Cloud-Free Image Generation from Cloud-Covered Images |
Objective: Removing clouds from satellite images using a deep learning image generation model.
- Designed and implemented a pipeline for cloud-free image generation using the Stable Diffusion inpainting model.
- Conducted preprocessing on satellite images, including cloud masking and normalization.
- Evaluated the model's performance by calculating pixel-wise loss using cloud-free ground truth images.
- Prepared findings for presentation in an academic conference and publication.

LEADERSHIP EXPERIENCE

Vice President, AUST CSE Society | Dec 2024 - Present
- Organized and led technical, academic, and cultural events for computer science students.
- Coordinated with faculty and industry professionals to host workshops and seminars.
- Managed a team of executives, ensuring smooth execution of events and initiatives to improve student engagement.
- Enhanced collaboration among students by promoting community-building and professional development opportunities.