MD Iqbal Hossain

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EDUCATION

Masters in Artificial Intelligence   May 2025 (Expected)
University of Wyoming
- CGPA - 3.2/4.00 (until Spring 2024)

BSc in Computer Science and Engineering   August 2019
BRAC University
- CGPA - 3.54/4.00 (Distinction)

Higher Secondary Certificate (Science)   October 2014
Dhaka Residential Model College, Dhaka, Bangladesh
- GPA - 5.00/5.00

SKILLS

Programming Languages
- Python • C++ • MATLAB • Java • Scala • HTML • C# • CSS • PHP • SQL • Octave

Programming Libraries, Frameworks and Tools
- OpenCV • Matplotlib • GAN • Diffusion • TensorFlow • PyTorch • Keras • LLM • Scikit-Learn • SciPy • Pandas
- OpenGL • Seaborn • CNN • NumPy • RNN • Bootstrap • Web Development • Database • AWS

Other Skills
- Fast learner • Communication • Leadership • Teamwork • Writing Skills • Time management • Responsible • Perseverance
- Problem-solving • R&D • Adaptability • Collaboration skills

Relevant Experience

Graduate Research Assistant | UWYO School of Computing | Laramie, WY   August 2024 – Present
- Working on AI and Edge computing applications to solve real-world problems
- Developing multimodal AI models combining LLM, sound and images
- Developed multimodal AI systems on Raspberry Pi and Nvidia Jetson for eagle detection in the wild, achieving a mAP@50-95 of 0.85
- Working on evaluating eagle behavior detection using machine learning models to analyze specific actions and patterns

AI and Edge Computing Developer | UWYO School of Computing | Laramie, WY   April 2024 - August 2024
- Contributed to AI and Edge computing projects within the Sage Continuum framework, focusing on optimizing performance and scalability
- Streamlined data integration from Internet of Things (IoT) devices through machine learning techniques to enhance system efficiency and real-time analysis.

Graduate Research Assistant | UWYO | Laramie, WY   August 2023 – December 2023
- Conducted research on 3D Computer Vision and Artificial Intelligence, focusing on cutting-edge techniques and applications
- Explored and implemented models from the PointNext 3D Computer Vision repository to advance 3D object recognition and analysis

Undergraduate Thesis | BRAC University | Dhaka, Bangladesh   August 2018 – August 2019
- Conducted research on deep learning and computer vision to develop a real-time surveillance system for identifying bikers without helmets, utilizing SSD Mobilenet V2 and Faster R-CNN Inception V2 models
- Published findings in a top conference, demonstrating high accuracy and performance on a dataset of 5626 labeled images with 24,465 bounding boxes

Computer Vision and image processing Engineer| Upwork | Remote   May 2017 – May 2022
- Collaborated with a PhD student from Concordia University, Canada, on a Pattern Recognition project to identify shop types from signage.
- Developed object depth estimation techniques using Motion Segmentation to enhance interaction with autonomous vehicles.

PUBLICATIONS
- Md Iqbal Hossain, Raghib Barkat Muhib, and Amitabha Chakrabarty. "Identifying Bikers Without Helmets Using Deep Learning Models." 2021 Digital Image Computing: Techniques and Applications (DICTA). IEEE, 2021.

SUMMARY OF HONORS, SCHOLARSHIPS AND AWARDS
- **Graduate Fellowship** in current grad program in UWYO
- **Merit Based Scholarship (70% scholarship on tuition) in my undergraduate program** for outstanding result in past and maintaining CGPA greater than 3.5 out of 4.0.
- **Dean's list** in 2 semesters in undergrad degree
- **Golden A+ in both Higher Secondary Certificate (HSC) and Secondary School Certificate (SSC)** for achieving the highest grade in all the subjects along with optional subjects
- **Top rated Freelancer at Upwork.** The Top-Rated badge is given to top 10% of freelancers in the world