MOHAMMAD NUR UJ JAMAN KHAN

📍 South Gazirchat (Dholpur), Savar Canttonment, Savar, Dhaka 1344

📱 01686773180, 8802224426095

✉️ nurujjaman1310@gmail.com , tutorials.jaman@gmail.com

Career Objective:

As a versatile software engineer with proficiency in multiple programming languages including C, C++, Python, Java, JavaScript, and SQL, my objective is to apply my comprehensive expertise in AI, machine learning, Computer Vision, NLP, LLM, Web & App with Django/Flask/Laravel, Embedded System & Robotics

Career Summary:

With a broad background in AI, Machine Learning, Deep Learning, RL, LLM, NLP, Computer Vision, and more, I have honed my skills in various languages like C, C++, Python, Java, JavaScript, PHP, and SQL. I am proficient in libraries such as TensorFlow, Torch, Scikit-learn, OpenCV, and have worked with technologies like YOLO, Transformers. My experience extends to web and app development using Laravel, Django, Flask, Streamlit, and Gradio. In addition, I have expertise in **Embedded Systems**, which involves designing, developing, and managing electronic devices that are dedicated to performing specific tasks. I have a solid understanding of **Digital and Analog Circuits**, which are fundamental to the design of electronic devices, including computers and mobile devices. Furthermore, I have experience in **Robotics**, which involves designing, constructing, and operating robots, as well as computer systems for their control, sensory feedback, and information processing. These skills allow me to create complex and innovative solutions in various fields

Special Qualification:

As a versatile engineer, I specialize in DevOps, MLOps, Industrial IoT, Enterprise Resource Planning, Enterprise & Parallel Computing, GPU optimization, and Fluid Machineries. I'm also an Autodesk-certified CAD/CAM professional with expertise in CNC , Solar and wind Energy

Employment History:

Total Year of Experience: 5.4 yrs

1. Data Science and AI Engineering (0.9 yr)
(17 Aug 2023 - Continuing)

Freelancer.com
Area of Expertise:
Computer Vision (0.8 yr), Data Science (0.8 yr), NLP (0.8 yr)

Duties/Responsibilities:
Achieved unparalleled success with a flawless track record of 100%

Success Rate, a seasoned freelancer with 6 diverse projects, over 108 hours of dedicated work, and a consistent 5-star rating.
Notable Works
- Federated Learning for Precision in Wave Beam Detection (Communication Technology): Federated learning is used to enhance millimeter wave (mmWave) communication systems, particularly in vehicle-to-infrastructure networks. It helps in efficient beam selection, reducing the overhead imposed by the beam search process.
- Machine Learning Powering Autonomous Vehicles (Artificial Intelligence): Machine learning algorithms are crucial for autonomous vehicles (AVs), enabling them to operate safely without human intervention. They analyze data from the vehicle`s sensors, allowing the AVs to learn from past experiences, adapt to new situations, and improve their driving capabilities.
- Document Copilot/Bot for Versatile Document Handling (Natural Language Processing): Document Copilot is an innovative document editor that uses Natural Language Processing (NLP) to generate high-quality content quickly. It helps overcome writer`s block by providing powerful, time-saving text suggestions.
- Langchain and Hugging Face Models for Tailored Applications (Machine Learning): Langchain and Hugging Face have collaborated to bring the power of large language models (LLMs) to developers. They offer a robust framework for integrating chat models and running LLMs locally, enhancing the flexibility and power of applications.
- X-Ray Image Analysis for Disease Detection (Computer Vision): X-ray image analysis is essential for disease detection and diagnosis. Techniques like segmentation using artificial intelligence have been discussed for X-ray images. These methods help in the diagnosis and treatment planning of diseases.

2. **Python and AI Developer (2.3 yrs)**
(18 Mar 2022 - Continuing)

Upwork
Area of Expertise:
C++programing (2.2 yrs), Machine Learning Algorithms (2.2 yrs), Python developer (2.2 yrs)

Duties/Responsibilities:
96% Job Success Rate, 40+ Works, 427 Hours of work, overall 4.8 out of 5 Rating
Notable works and types:
- General Artificial Intelligence Development:
- Artificial intelligence simple bot
- Add keypoint Extraction Post-Processing Layer to TensorFlow Model
- Python and machine learning expert needed
- Artificial intelligence programmer needed to solve small tasks
- Development of ChatBot using ChatGPT, LangChain, Whisper and Wolfarm Alpha

- Large Language Model and NLP:
- AI Deep learning chat bot. Future technology, robotics
- Need NLP AI Master to Make Books into Chat Bots
- Langchain with LLaMA2 - Quick fix jupyter notebook
- Design an AI search bar
- Advanced Deep Learning (eg BERT, ROBERTa, GPT2, T5 etc) for NLP

- Custom Machine Learning Development:
- Help with ML GAN Model Training
- Train a Simple Pricing Model
- Building an autoencoder
- Implementing search algorithms
- StyleGAN, PIx2Pix GAN Developer to Generate Baby image

Computer Vision:
- Extracting Planar Roof Structures Planes from Aerial Images
- Create an AI that understand screenshot
- AI personal trainer
- Run Face recognition codebase in windows OS

- Recommender System:
- Recommender script with python

- Web Application Development:
- Personal trainer and symptoms checker web app live
- Developer needed for a Fitness web App

- Algorithmic Trading with ML:
- Jupyter Notebooks Live Trading
- Jupyter Notebook and Matplotlib expert needed

- Voice clone and TTS:
- Create Virtual Microphone for SPEECh to SPEECH real-time conversion with trained models
- Voice Clone and TTS

- Other Specialized Tasks:
- Stochastic Control and forecasting using Kalman filters
- C++ Code Layout and Recompiling for Fluid Dynamics Simulation

3. Computer Programmer (9.4 yrs)
(22 Feb 2016 - Continuing)

Fiverr
Area of Expertise:
Data Analysis Project (5.3 yrs), Programming (5.3 yrs), Web Developer (5.3 yrs)

Duties/Responsibilities:
Previously to rated currently Level 2 Seller and 5 Star Rating with 10 out of 10 Success rate
Notable Works
- Versatile Bot Development (Artificial Intelligence): Versatile bot development involves creating bots that can perform a wide range of tasks. These bots can be programmed to

interact with users, automate tasks, and even learn from their interactions.
- Next-Gen AI Image Generation (Computer Vision): Next-generation AI image generation involves creating realistic images from descriptions or modifying existing images. This technology is used in various fields, including art, design, and entertainment.
- Advanced Image Restoration (Computer Vision): Advanced image restoration involves using sophisticated techniques to repair and enhance old or damaged images. This includes removing noise, enhancing colors, and repairing physical damage.
- Innovative Camouflage Detection (Computer Vision): Innovative camouflage detection involves identifying objects that are seamlessly embedded in their surroundings. This technology is used in various fields, including military, surveillance, and wildlife conservation.
- Engaging Chatbots (Natural Language Processing): Engaging chatbots are designed to interact with users in a natural and engaging manner. They can be used in various fields, including customer service, marketing, and entertainment.
- Dynamic Sports Analytics (Data Analysis): Dynamic sports analytics involves using data to analyze and improve athletic performance. This includes tracking player performance, analyzing team dynamics, and developing game strategies.
- Realistic Fluid Simulation (Physics Simulation): Realistic fluid simulation involves creating accurate and realistic simulations of fluid dynamics. This technology is used in various fields, including entertainment, engineering, and scientific research.
- Stable Diffusion (Computer Vision): Stable Diffusion is a latent diffusion model, a kind of deep generative artificial neural network. It gradually adds noise to the data and then carefully removes this noise step-by-step, reconstructing the original data from its noisy state. It`s used for generating images from text, modifying images based on text, or filling in details on low-resolution or low-detail images.
- StyleGAN3 Image Generation (Computer Vision): StyleGAN3 is an autoencoder neural network that creates a latent space representation of a given input image and then generates the image back again. It uses a sequence of layers, like convolutions, nonlinearities, up sampling, and per-pixel noise.
- Phi and Mistral based Advance Copilot (Natural Language Processing): Phi-2 is a 2.7 billion-parameter language model that demonstrates outstanding reasoning and language understanding capabilities. It`s used for exploration around mechanistic interpretability, safety improvements, or fine-tuning experimentation on a variety of tasks. Mistral is a model that can be integrated as an API endpoint to applications.

4. **Full Stack Developer (2.3 yrs)**
(1 Dec 2020 - 1 Mar 2023)

Singularity Limited
Area of Expertise:
Business Analysis (2.2 yrs), Database Application (2.2 yrs), Recommendation engine (2.2 yrs)

Duties/Responsibilities:
- CDR Analysis (Telecommunications): Call Detail Record (CDR) Analysis involves the examination of call data records generated by telecommunication companies. It

provides insights into call patterns, network usage, and customer behavior, which can be used for boosting productivity, identifying network issues, and enhancing customer service.
- E-commerce Optimization (Digital Marketing): E-commerce optimization is a method to improve your website to attract more traffic and convert visitors into customers. It focuses on enhancing design, product description, search engine ranking, and shopper experience.
- Inventory Control (Supply Chain Management): Inventory control is the process of managing stock levels while monitoring customer demand. This allows businesses to ensure they have the products people want at the right time in the correct quantities.
- Facebook Marketing Automation (Social Media Marketing): Facebook Marketing Automation involves using automated tools and processes to streamline marketing tasks on the Facebook platform. It encompasses scheduling posts, running targeted ad campaigns, engaging with followers, and analyzing performance metrics.
- ERP Integration (Enterprise Resource Planning): ERP integration refers to the process of connecting an enterprise resource planning system with other software applications, databases, or external systems to facilitate the exchange of data and ensure synchronization across various business functions.
- Business Web Design (Web Development): Business web design involves creating a website that effectively represents a business online. It includes aspects like user-friendly navigation, high-quality images, clear call-to-action buttons, and a visually appealing layout.
- CRM Strategy (Customer Relationship Management): A CRM strategy is a carefully devised plan that a business employs to manage and nurture its relationships with customers. It`s a roadmap for how the business collects, manages, and uses customer data to provide personalized experiences and build stronger relationships.
- App-Based Recommender Systems (Machine Learning): Recommender systems are machine learning systems that help users discover new products and services. They analyze user behavior and preferences to provide personalized recommendations. These systems are commonly used in e-commerce platforms, music streaming services, and content providers.

5. <u>Research Assistant (3 yrs)</u>
(1 Aug 2020 - 1 Jul 2023)

Bangladesh Agriculture University
Area of Expertise:
Computer Vision (2.9 yrs), Deep learning (2.9 yrs), NLP (2.9 yrs)

Duties/Responsibilities:
- Build sensor based IoT system for monitoring various plant health and circumstances including temperature , humidity, SPO2 , CO2 and others substance measurement and evaluate harvesting forecast to achieve maximum production
- Plant disease and severity Identification with deep learning vision
- Rice grain classification and counting for intelligent rice mills (Used YOLO8 custom training)
- Pumkin flower classification for Male/Female sort for increasing extra size
- Farmers mate LLM chatbot

Academic Qualification:

Exam Title	Concentration/Major	Institute	Result	Pas.Year	Duration	Achievement
Bachelor in Engineering (BEngg)	Mechanical Engineering	Institute of Engineers Bangladesh	Enrolled	2027	4	AMIE Part A
Bachelor of Science (BSc)	Computer Science & Engineering	Jashore Science & Technology University	CGPA:2.83 out of 4	2021	4	Thesis Dissertation

Training Summary:

Training Title	Topic	Institute	Country	Location	Year	Duration
Python for Everybody	An advanced program that built upon the 'Python for Everybody' course. The training focused on key programming concepts such as data structures, networked APIs, and databases using Python. The capstone project provided hands-on experience in designing and implementing data retrieval, processing, and visualization applications. This training has further enhanced my ability to develop sophisticated Python applications.	University of Michigan On Coursera	USA	Remote / Online	2020	6 Months
Energy Production, Distribution & Safety	This training delved into the energy industrys structure, disruptive technologies, and renewable energies. It highlighted	University at Buffalo	USA	Online	2020	8 Months

	their influence on the Smart Grid. Participants learned about modern power systems, natural gas properties, distribution operations, and safety practices.					
Developing Industrial Internet of Things	This training covers IoT tech, market opportunities, OS, networking, security, project planning, sensors, storage, machine learning, big data, SystemC, debugging, idea promotion, and business concepts like CapEx and OpEx.	University of Colorado Boulder	USA	Online	2020	6 Months
AWS Fundamentals	This AWS Specialization teaches core services, security, workmigration, and serverless app development, with practical labs and exercises for hands-on learning.	AWS	USA	Remote	2020	3 Months
Autodesk CAD/CAM for Manufacturing	This training introduced learners to latest tech trends in manufacturing, including CAD and CAM. They explored manufacturing processes, completed	Autodesk	USA	Remote	2020	6 Months

	hands-on projects, and honed CAD and CAM skills to proficiently use Autodesk Fusion 360.				

Professional Qualification:

Certification	Institute	Location	From	To
IBM Applied DevOps Engineering Professional Certificate	**IBM**	**Remote**	**Octobor 2, 2023**	**May 8, 2024**
IBM AI Engineering Professional Certificate	IBM	Remote	January 4, 2024	June 8, 2024
Google IT Support Professional Certificate	Google	Remote	July 18, 2023	June 8, 2024
DeepLearning.AI TensorFlow Developer Professional Certificate	Deeplearning.AI	Remote	March 12, 2020	July 27, 2021
Google IT Automation with Python Professional Certificate	Google	Remote	February 10, 2020	September 25, 2020

Career and Application Information:

Looking For   : Mid Level Job
Available For   : Full Time
Present Salary   : Private
Expected Salary   : Will discuss
Preferred Job Category   : Education/Training,IT/Telecommunication,Research/Consultancy
Preferred District   : Barishal, Chattogram, Dhaka, Khulna, Mymensingh, Rajshahi, Rangpur, Sylhet
Preferred Country   : Australia, China, Japan, United Kingdom and Remote

Skill:

Fields of Skill	Description
C++programing **Python 3** **JavaScipt** **PHP** **MySQL** **Java** **TensorFlow** **PyTorch** **ScikitLearn** **Machine Learning** **Deep learning** **Reinforcement Learning**	A dynamic and versatile technologist, I bring a strong foundation in **C++ programming**, **Python 3**, **JavaScript**, **PHP**, **MySQL**, and **Java**, demonstrating my comprehensive understanding of both front-end and back-end development. My proficiency in **TensorFlow**, **PyTorch**, and **ScikitLearn** underscores my ability to leverage state-of-the-art tools for complex computational tasks. With expertise in **Machine Learning**, **Deep Learning**, and **Reinforcement Learning**, I am adept at designing and implementing sophisticated AI models. My skills in **Computer Vision** and **NLP & LLM** highlight my capability to enable machines to understand and interpret the visual world and human language. Furthermore, my

- Computer Vision - NLP & LLM - Text to Speech/Speech to Text - Voice Clone - Text to Image/Video - Robotics - Embedded Systems	knowledge in **Text to Speech/Speech to Text**, **Voice Clone**, and **Text to Image/Video** technologies showcases my ability to bridge the gap between human and machine interaction. This diverse skill set positions me as a valuable asset in any team aiming to push the boundaries of technological innovation. I am excited to bring my skills to new challenges and contribute to the future of technology. In addition, I have a strong background in **Embedded Systems**, **Digital and Analog Circuits**, and **Robotics**. My expertise in Embedded Systems allows me to design and manage dedicated electronic devices for specific tasks. My understanding of Digital and Analog Circuits plays a crucial role in the design of electronic devices, including computers and mobile devices. My experience in Robotics involves designing, constructing, and operating robots, as well as developing computer systems for their control, sensory feedback, and information processing. This diverse skill set positions me as a valuable asset in any team aiming to push the boundaries of technological innovation. I am excited to bring my skills to new challenges and contribute to the future of technology.

Accomplishment:

Portfolio

1. *SliderGAN image generation code implemented on Google colab*

   URL: https://www.upwork.com/freelancers/~010c98ce87604e5274?p=1426459573718761472

   Generative adversarial network or GAN is a prominent way to generate new image , audio, video, etc. from an existing dataset. It`s an already existing generative network called slider gan which was customized and partially re coded for apply in limited dataset.

2. Rice classification and grain count for Standardization

   URL: https://www.upwork.com/freelancers/~010c98ce87604e5274?p=1634988014638297088

   This project aims to grade rice industrially for export from the Indian Subcontinent, where rice is a staple food and a major industry. The goal is to ensure premium quality, maximize production, and authenticate rice.

Publication

1. *A Systematic Study and Analysis of Bengali Folklore with NLP*

   URL: https://arxiv.org/pdf/2203.06607

   Our study aims to analyze Bengali folklore using NLP, making it more comprehensible. This first step towards Bengali NLP will focus specifically on folklore, enhancing understanding of this rich cultural heritage.

Awards/Honors

1. *Researcher Recommendation from Department of Folklore Rajashi University*

   Issued On: 1/7/2021

   URL: https://drive.google.com/file/d/1oAWbOGYks-3yLrYHIBwqU46y93p_ywNm/view?usp=sharing

Recoomendation from Dr. Rowshon Zahid, Head of the depertment of Folklore for achiveing success on studying folklore in computional way

Projects

1. Autonomous Multipurpose Weapon System - A computational military approach

   Issued On: 1/2/2023

   URL: https://drive.google.com/file/d/1l9fPAfV--nj0Zn_vCFUUlSaL5pzA0TZz/view?usp=sharing

   Were developing an autonomous weapon system using a CNN model for real-time detection and control. It targets enemy uniforms, weapons, and postures, learning from new data to improve over time. This enhances counter-terrorism and counter-insurgency efforts.

Extra Curricular Activities:

Sports:
Distant Swimming (Free , Butterfly and Brest stroke) , Novice Karate, Rifle Shooting (100 Yards)
Novice power lifter
Barbell Squat - 100 KG x 10 Reps
Barbell Chest Press - 80 KG x 10 Reps
Barbell Row - 80 KG x 10 Reps
Barbell Military Press - 60 KG x 5 Reps
Barbell Deadlift - 120KG x 5 Reps

Culture:
Singer (Modern and Tagore)

Adventure and trekking

Language Proficiency:

Language	Reading	Writing	Speaking
Bengali	High	Medium	High
English	High	High	High

Personal Details :

Father's Name	:	Md Ismail Hossain Khan
Mother's Name	:	Nurjahan Khan
Date of Birth	:	13 Oct 1994
Gender	:	Male
Height (Meter)	:	1.69
Weight (Kg)	:	82
Marital Status	:	Married
Nationality	:	Bangladeshi
Religion	:	Islam

Permanent Address	:	Beer Nibas, Plot - 258, Road - 3, Rupayon Abashon 1, East Jamgora, Ashulia, EPZ, Savar, Dhaka 1349	
Current Location	:	Dhaka	
Blood Group	:	O+	

Reference (s):

		Reference: 01	Reference: 02
Name	:	Dr Sayed MD Galib	Arch. MD Nurul Alam Khan
Organization	:	Jashore University of Science and Technology	Mondol Group
Designation	:	Professor, Chairman and Dean of Faculty	AGM (Architecture)
Address	:	Faculty of Engineering and Technology (1st Floor), Bangabandhu Sheikh Mujib Academic Building, JUST, Jashore - 7408	Nikkon Housing, Kuturia, Ashulia
Primary Mobile No	:	01781408274	01712054549
Primary Email	:	galib.cse@just.edu.bd	nirjhararch@gmail.com
Relation	:	Academic	Relative