UTSHAB KUMAR GHOSH

**✆** +8801701067875, +8801623642710  [www.github.com/utshabkg](http://www.github.com/utshabkg)

✉ [kumarutshab@gmail.com](mailto:kumarutshab@gmail.com) www [utshabkg.github.io](https://utshabkg.github.io/)

 [www.linkedin.com/in/utshabkg](http://www.linkedin.com/in/utshabkg)  Dhaka, Bangladesh



**I have been working with Python, Machine Learning, and Data Science for 4+ years. I also have an experience of 1+ year in Full Stack Development. My motto is to collaborate in the field of SWE and ML. With the analytical skill of problem solving, full stack dev, and ML/DL, I want to gather experience and knowledge from a based environment, contributing to the humankind and industry.**

**Education**

**Certifications**

* **Deep Learning Specialization**

**Institute:** deeplearning.ai

* **Applied Data Science** **Specialization**

**Institute:** IBM

* **Data Scientist Career Track**

**Institute:** Datacamp

* **AI for Medical Diagnosis**

**Institute:** deeplearning.ai

**Interpersonal Skills**

* Management
* Teamwork
* Multitasking
* Leadership

**Languages**

* English
* Bangla

**Interests**

* Music & Instruments
* Taekwondo
* **Jan 2017- Bachelor of Science: Computer Science & Engineering** (CGPA: 3.22)

**Oct 2022** Rajshahi University of Engineering & Technology – Rajshahi, Bangladesh

**Work Experience**

* **Dec 2022- Jr. Software Engineer  
  Present Nascenia Ltd.** – Dhaka, Bangladesh

**Department:** Machine Learning & Full Stack Dev

* + - * **A2I Chatbot for Govt. sites:** In collaboration with a2i, we're pioneering the development of multilingual conversational chatbots, including Bengali, tailored specifically for government websites. Our focus is on serving organizations such as Muktopaath and MyGov, aiming to enhance public service delivery in Bangladesh. We are using the RAG architecture and Large Language Models (LLMs) through LangChain. This involves advanced research in LLMs like Llama-2/3, mBart, and GPT-3.5, coupled with technical pursuits such as data scraping, preprocessing, and fine-tuning. Our efforts also extend to developing Full Stack solutions, including Flask APIs and custom Admin Panels, to ensure seamless integration and customization for our clients.
      * **Project in Laravel Framework:** Worked as Full Stack developer.
      * Building Components with JavaScript, React, PHP.
* **Feb 2023- Mentor  
  Present Code Studio Academy** – Dhaka, Bangladesh

**Department:** Python, Machine Learning & Data Science

* Currently leading a Machine Learning Bootcamp with over 120 enrolled students. The curriculum covers foundational concepts in Python, Machine Learning, Deep Learning, SQL, and includes practical, hands-on projects designed to reinforce learning outcomes.
* **Oct 2020- AI Research Assistant**

**Sep 2022 MyMedicalHUB Int.** – Florida, USA (Remote)  
**Department:** Machine Learning

* + - * **Gait Analysis Project:** Focused on the detection of Parkinson's disease utilizing Pattern Recognition, Machine Learning, and Deep Learning models. Responsibilities included the analysis of video data to identify key gait patterns associated with the disease to accurately classify and diagnose Parkinson's disease from the collected data.
      * **Sports Video and Image Analysis Project:** Engaged in a comprehensive Sports Video and Image Analysis Project, where machine learning techniques such as pattern recognition with angle-based posture analysis and transfer learning models were employed. The project focused on extracting valuable insights from sports videos and images to enhance performance analysis and decision-making in athletic contexts.
      * Worked with AWS, Apace Server, Django REST API.

**Technical Skills**

* + **Programming** Python, C, Data Structures & Algorithms.
  + **Web Development** ReactJS, SaaS, Tailwind, JavaScript, Django, Flask, PHP, Laravel.
  + **Data Science,** Data Preprocessing, Analysis & Visualization, ANN, CNN,

**Machine Learning,** LLM, RAG, LangChain, Rasa, Supervised & Unsupervised Learning Algorithms,

**& Deep Learning** Feature Engineering, Feature Selection & Extraction, Fine-Tuning & Training.

* + **Frameworks, Library** TensorFlow, PyTorch, Keras, OpenCV, NumPy, Pandas, Scikit-Learn,

**& Tools** Tableau, Excel Spreadsheet.

* + **Mathematics for ML & DL** Algebra, Statistics, Possibility, Geometry, Matrix.
  + **Database** MySQL, MariaDB, Firebase, MongoDB.
  + **Cloud** AWS, Azure, Apache Server.
  + **Miscellaneous** Git, Docker, Linux, Latex, MS Office, Adobe Illustrator, Premiere Pro.

**Researches**

* **Accurate Gait Recognition with Inertial Sensors using a New FCN-BiLSTM Architecture**

**Journal:** Computers and Electrical Engineering (**Q1**, **Available:** <https://lnkd.in/g8QZYgMt>)

* **Most Dominant Metabolomic Biomarkers Identification for Lung Cancer**

**Journal:** Informatics in Medicine Unlocked (**Q2**, **Available:** <https://lnkd.in/gh8ZaeHK>)

**Projects**

* **Bone Marrow Cell Classification** (Ongoing)
* [**My Machine Learning Projects**](https://github.com/utshabkg/ML_Competition-AND-Practice)
* [**ML Web App with Flask & AWS**](https://github.com/utshabkg/end-to-end-mlproject-bootcamp)
* [**Django Ecommerce Site**](https://github.com/utshabkg/Ecommerce_site_Django)
* [**IMDB Clone**](https://moviereview-utshabkg.vercel.app/) (ReactJS Project)

**Competitions**

* **Kaggle TensorFlow - Help Protect the Great Barrier Reef** *[Top 49% (1019th out of 2109)]*
* **Kaggle PetFinder.my - Pawpularity Contest** *[Top 13% (443th out of 3545)]*
* **Datahack Traffic Forecasting** *[Time Series Dataset, Running]*
* **HackerEarth ML Challenge: Fast, Furious and Insured** *[86th out of 2796]*
* **HackerEarth ML Challenge: A Fine Windy Day** *[54th out of 2034]*
* **300+ Problems solved** atCodeforces, Codechef, Leetcode, LightOJ and other Online Judges.