# Ahmed Anwar

# Machine Learning Engineer

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#### TECHNICAL SKILLS

Programming Languages: Python, JavaScript, C, Java

**Libraries and Tools:** PyTorch, Tensorflow, Keras, Sklearn, Pandas, Matplotlib, Numpy, Git **NLP and ML Expertise:** Transformers (BERT, GPT), RNN, LSTM, CNN, Generative AI

Database: MySQL, PostgreSQL, MSSQL

Web Development Framework and Tools: Django, HTML, CSS, Bootstrap, Rest API, FastAPI

Additional Skills: Threading, SQLAlchemy, Docker

#### ABOUT MYSELF

Venturing into the tech world with a Computer Science degree, I'm drawn to the mysteries of NLP and the craft of web development. My path, from tutoring at BRAC University to interning at Genuine Technology & Research Ltd., has sharpened my leadership and stoked my passion for innovation. Now, I stand ready to tackle the unknown, infuse creativity into groundbreaking projects, and thrive in the challenges ahead.

# **EDUCATION**

# **BRAC University**

BSc in Computer Science and Engineering [CGPA-3.81]

# Rajuk Uttara Model College

Higher Secondary Certificate [GPA-5.00]

Dhaka, Bangladesh

July 2020 - February 2024

Dhaka, Bangladesh

July 2017 - June 2019

# WORK EXPERIENCE

# **Student Tutor**

BRAC University, Dhaka, Bangladesh

October 2022 - December 2023

- Tutored Python, OOP, Data Structures, and algorithms at BRAC University.
- Provided individualized guidance, fostering a supportive learning environment.
- Developed time management, teaching and leadership skills.

# **Python Intern**

Genuine Technology & Research Ltd.

March 2024- June 2024

- Working with AI Agent system for automation tasks, contributing to increased efficiency and productivity.
- Utilizing Large Language Models (LLM) for various purposes, including natural language processing and data analysis.
- Gained hands-on experience with AI-based software(RAG based), enhancing understanding of machine learning algorithms and their applications.
- Collaborating with the team to develop and implement innovative solutions in Python for real-world problems.
- Participating in regular code reviews and providing constructive feedback to enhance code quality

# **PROJECTS**

- OwnAgent Project: AI-based Task Automation System, Developed an AI-driven task automation system leveraging advanced AI agents and Large Language Models (LLMs) to learn and replicate user interactions. GitHub
- Offensive Text Detection Model, Designed and implemented offensive speech identification models utilizing BiL-STM, SVC, and Logistic Regression, showcasing proficiency in NLP and machine learning techniques. <u>GitHub</u>
- Water Quality Detection Model, Developed a Water Quality Detection Model employing SVM, Linear Regression, Decision Tree, KNN, Naive Bayes, and Logistic Regression to predict the safety of water samples, demonstrating expertise in diverse machine learning algorithms for environmental analysis. Github
- A model for Author detection from Bangla texts, Constructed author detection models for Bangla texts, leveraging BiLSTM and BiLSTM combined with BanglaBERT, showcasing proficiency in natural language processing and advanced deep learning techniques. GitHub

- Fine-tuning Llama2 for Question Answering Task, For context-driven Question Answering, I fine-tuned the metallama/Llama-2-7b-chat-hf model, which showed superior performance. Utilized the SQuAD2.0 dataset, which combines 100,000 questions in SQuAD1.1 with over 50,000 unanswerable questions. GitHub
- **Style Transfer Model**, Implemented Text Generation Models using Style Transfer technique by fine-tuning language models like BanglaT5 and mT5-small, demonstrating expertise in natural language processing and creative content generation.
- **Cricket-Chatbot**, Developed an AI cricket chatbot utilizing Retrieval Augmented Generation (RAG) with a focus on cricket, leveraging llama2 and mistralai. <u>Github</u>
- LinkedIn Automation System: Task Automation for LinkedIn, Developed a task automation system for LinkedIn, enhancing productivity through features like login automation, post analysis, automated reactions, and content extraction. Github
- Task Management Website, Developed a comprehensive Task Management Website using Django and PostgreSQL, empowering users to efficiently organize, track, and manipulate tasks, including features like task categorization, priority setting, image integration, and user profile management. Github
- Doctor Suggesting Website, Developed a dynamic Doctor Recommending Website using Django and MySQL, incorporating advanced features such as personalized doctor searches, BMI calculation, user reviews, hospital admin tools, and real-time medical news aggregation, demonstrating expertise in full-stack web development and database management. Github
- Resource Sharing and Course Review Website, Built a dynamic MERN stack website with integrated AI sentiment analysis for course reviews, facilitating user contributions through reviews, blogs, resource sharing, and problem-solving. Demonstrates proficiency in full-stack development and innovative AI applications. Github
- **Text-to-speech converter**, Developed a versatile Text-to-Speech Converter application enabling both text-to-speech and speech-to-text functionalities, showcasing proficiency in Python and integration of essential libraries such as Tkinter, Pillow, SpeechRecognition, Wave, and pyttsx3. **Github**

# **CERTIFICATIONS**

- Generative AI with Large Language Models DeepLearning.AI, Amazon Web Services Issued May 2024 — Credential ID YHGQPC4GTDMG
- Neural Networks and Deep Learning DeepLearning.AI Issued Apr 2023 — Credential ID DYK78KKDML8X

# **ACHIEVEMENTS**

- The Duke of Edinburgh's Award [Gold Awardee]

  Issued Dec 2018
- Merit Scholarship Award, BRAC University Awarded for maintaining high CGPA.
- VC's List and Dean's List Award, BRAC University
  As recognition of achieving outstanding academic performance

# **EXTRACURRICULAR ACTIVITIES**

- BRAC University Computer Club
- BRAC University Chess Club

# REFERENCES

- Dr. Farig Yousuf Sadeque
  Assistant Professor, Department of Computer Science and Engineering, BRAC University
- Dr. Md. Khalilur Rahman Associate Professor, Department of Computer Science and Engineering, BRAC University