Rizwan **Hasan**

SOFTWARE ENGINEER · PYTHON ENTHUSIAST

Chattogram, Bangladesh

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Education

East Delta University (EDU)   *Chattogram, Bangladesh*

B.S. IN COMPUTER SCIENCE AND ENGINEERING   *Sep. 2017 - Dec. 2021*

- Learned core concepts of algorithms, data structures, software development, and Machine Learning.
- Got research experience and published my thesis on IEEE.

Skills

DevOps	Linux, Azure, Docker, Jenkins, Bitbucket Pipeline, GitHub Actions
Back-end	FastAPI, Django, Express, Flask, REST API, Websocket
Programming	Python, Javascript (Node.js)
Database	SQlite3, MongoDb, SQL Server, PostgreSQL, Redis
AI/ML	Scikit-learn, Pandas, Numpy, XGBoost, Catboost, LLM, Langchain, RAG

Experience

Counterfoil (Ternary Solutions, Ltd.)   *Bangladesh, Remote*

SOFTWARE ENGINEER (BACKEND DEVELOPMENT)   *January. 2025 - Present*

- Architected and developed analytics features using Django/Python backend framework, collaborating cross-functionally to enhance data insights and reporting capabilities.
- Optimized multiple API endpoints to improve performance and response times, ensuring scalable backend infrastructure.
- Led debugging and maintenance efforts while delivering new features, maintaining high code quality through rigorous testing and documentation.

Social27, Ltd.   *India, Remote*

SOFTWARE ENGINEER (BACKEND DEVELOPMENT)   *Jun. 2023 - Present*

- Investigate and reproduce user-reported issues across complex systems, including LLM, AI models, Azure services, ChatGPT, and Langchain.
- With my expertise in Python, FastAPI, MongoDB, Redis, and Microsoft SQL Server, I effectively debug and rectify backend issues to ensure optimal performance and reliability.
- Apply innovative solutions to challenges in AI integration, cloud computing on Azure, and the development of scalable systems, ensuring robust functionality and user satisfaction.

ClearML (Allegro Artificial Intelligence, Ltd.)   *USA, Remote*

SOFTWARE ENGINEER (DEBUGGING, BUG FIXING, TEST WRITING)   *Feb. 2022 - Jul. 2023*

- Troubleshoot and resolved issues in the ClearML Python package using VSCode, PyCharm, TensorFlow, PyTorch, etc
- Built and implemented CI infrastructure using Bitbucket Pipelines, including unit and integration tests in Python.
- Developed technical documentation tools using Docusaurus and Sphinx, and created data processing pipelines using Jenkins Pipelines.

Extracurricular Activity

Microsoft Learn Student Ambassadors   *Bangladesh*

STUDENT AMBASSADOR   *May. 2020 - Dec. 2021*

- Conducted webinar on various technical topics regarding Microsoft technologies.
- Participated in a lot of webinars hosted by the developer advocates and recruiters from Microsoft.
- Maintaining community contributions by learning and sharing knowledge along with other ambassadors across the world.

Opensource Contribution

MagpieOS (A Custom Flavored Linux Distribution)   *Bangladesh*

FOUNDER & DEVELOPER   *Jan. 2018 - May. 2020*

- MagpieOS is an Arch Linux based custom flavored Linux Distribution for pc users.
- Featured in ItsFoss: **itsfoss.com/magpieos**
- Listed on Arch-based distributions official list: **wiki.archlinux.org/title/Arch-based_distributions**
- Wikipedia: **bn.wikipedia.org/s/bkm7**

Mirrorlist Manager for Arch Linux
FOUNDER & DEVELOPER
Bangladesh
Oct. 2018 - Present
- A Qt-based desktop application for easy mirror list management in Arch Linux, developed using Python and PyQt5 Framework.
- Featured in ItsFoss: **itsfoss.com/archlinux-mirrorlist-manager**
- Arch User Repository: **aur.archlinux.org/packages/mirrorlist-manager**

Free Hash Checker (Desktop Application)
FOUNDER & DEVELOPER
Bangladesh
Jul. 2018 - Present
- A lightweight software for calculating any file's hash code, supports MD5, SHA1, SHA224, SHA384, SHA256, SHA512 hashing, developed using Python and PySide2.
- GitHub: **github.com/Rizwan-Hasan/Free-Hash-Checker**
- Sourceforge: **sourceforge.net/projects/free-hash-checker**

Research & Publications

CONFERENCE PAPER

2022	**Rizwan Hasan**, Sohrab Hossain, Fahim Irfan Alam, Mannpreet Barua (2022). Bangla Music Genre Classification Using Fast and Scalable Integrated Ensemble Boosting Framework. In *IEEE*.	*IEEE*
2022	Muhammad Sakib Khan Inan, **Rizwan Hasan**, Tabia Tanzin Prama (2022). An Integrated Expert System with a Supervised Machine Learning based Probabilistic Approach to Play Tic-Tac-Toe. In *IEEE*.	*IEEE*
2021	Muhammad Sakib Khan Inan, Rubaiath E Ulfath, Fahim Irfan Alam, Fateha Khanam Bappee, **Rizwan Hasan** (2021). Improved Sampling and Feature Selection to Support Extreme Gradient Boosting For PCOS Diagnosis. In *IEEE*.	*IEEE*
2021	Muhammad Sakib Khan Inan, **Rizwan Hasan**, Fahim Irfan Alam (2021). A Hybrid Probabilistic Ensemble based Extreme Gradient Boosting Approach For Breast Cancer Diagnosis. In *IEEE*.	*IEEE*

JOURNAL

2022	Muhammad Sakib Khan Inan, Fahim Irfan Alam, **Rizwan Hasan** (2022). Deep integrated pipeline of segmentation guided classification of breast cancer from ultrasound images. In *Elsevier*.	*ELSEVIER*

Honor and Awards

DOMESTIC

2020	**Certificate of Honour for Trainer**, Conducted a 3 days long workshop on "Fundamentals of Python" as a trainer at my university under the computer club.	*Chattogram, Bangladesh*

Presentation

Introduction to GitHub
CONDUCTED THE SEMINAR AT MY UNIVERSITY WITHIN THE PERIOD OF MY UNDERGRADUATE COURSE.
Chattogram, Bangladesh
Aug. 2017
- Explained the importance of Git version control for code maintenance.
- Showed basic hands-on demo of GitHub platform.

First National Workshop on "Big Data and Machine Learning (BDML 2020)"
PRESENTED AN IDEA ON FAKE NEWS DETECTION USING A MACHINE LEARNING-BASED APPROACH
Chattogram, Bangladesh
Dec. 2020
- Workshop was held by the Dept. of Computer Science & Engineering, Chattogram University of Engineering and Technology.
- Alongside two team members, presented an idea on Fake News Detection Using a Machine Learning-based approach.

Writing

Technical Writer
WRITER & MODERATOR
Dev.to
Nov. 2019 - PRESENT
- Get more than 30X speedup on your Python code **dev.to/techlearners/get-more-than-30x-speedup-on-your-python-code-23ol**
- What is JSON? And why do you need it? **dev.to/techlearners/what-is-json-and-why-do-you-need-it-21nd**
- Add custom domain in a GitHub page with Cloudflare **dev.to/techlearners/add-custom-domain-in-a-github-page-with-cloudflare-3goa**
- How to set up a Samba Server in Ubuntu and share files seamlessly **dev.to/techlearners/how-to-set-up-a-samba-server-in-ubuntu-and-share-files-seamlessly-5foa**
- How to interface Oracle Database with Python and execute queries **dev.to/techlearners/how-to-interface-oracle-database-with-python-and-execute-queries-4bin**
- How to setup Oracle Database 11g XE on Windows and unlock the HR user **dev.to/techlearners/how-to-setup-oracle-database-11g-xe-on-windows-and-unlock-the-hr-user-37p3**