



HRITWIK GHOSH

B. Tech in
Computer Science & Engineering(Specialization in AI&ML)



CONTACTS

 Munchef Bazar,Kali Bari
Road, Patiya District:
Chittagong, Bangladesh.

 +919440816501
+8801869532696

 me.hritwikghosh@gmail.com

 [GitHub](#)

 [LinkedIn](#)

 [Google Scholar](#)

 [ORCID](#)

 [ResearchGate](#)

 [Website](#)

PERSONAL DETAILS

DOB: 06/07/2002
NID:8713651704

ACHIEVEMENTS

• Awarded **Raman Research Award** for Publication, VIT-AP University in 2023.

• **Best Research Paper Award** in ICISML Conference in 2023.

• **Best Technical Club Award:**Led the Machine Learning Club to be awarded 'Best Technical Club' for the academic year(2023-2024)

ABOUT ME

Hello! I'm Hritwik Ghosh from Bangladesh, an undergraduate in Computer Science at VIT-AP University, India. With over 20 research projects in machine learning and AI, I've published in journals like IEEE XPLORE and Computers in Biology and Medicine. I've presented at major conferences, including AIHC 2023 in Slovakia and AMLDA-2023 in Germany. Driven by innovation, I'm passionate about addressing real-world challenges and advancing technology.

FORMATION

VIT-AP UNIVERSITY, ANDHRA PRADESH 2021 – PRESENT

Bachelor of Technology in Computer Science & Engineering

CGPA: **7.50** out of 10.00

♥ Amaravati, India

Gachbaria Government College, Chittagong

2018 – 2020

Higher Secondary Certificate Examination

Group: Science

GPA: **5.00** out of 5.00

Board:Chittagong,Bangladesh

Patiya Model High School, Chittagong

2016 – 2018

Secondary School Certificate Examination

Group: Science

GPA: **5.00** out of 5.

Board:Chittagong,Bangladesh

EXTRA-CURRICULAR ACTIVITIES

● Vice-President of Machine Learning Club in VIT-AP University

● Event Team Lead of Bongojo in VIT-AP University



Internship

● Internship under Dr.P.Pavan Kumar [April 2023-April 2024]
Faculty of Science and Technology,IFHE,Hydrabad 12 Months

● Internship under Dr.Mohammed Altaf Ahmed [May 2024-November 2024]
Faculty of Computer Engineering & Science,Prince Sattam Bin
Abdulaziz University,Saudi Arabia 6 Months

SKILLS

PROFESSIONAL SKILLS

Programming Language & Framework

- ◆ C
- ◆ HTML/CSS
- ◆ MS Word/Excel
- ◆ PHP
- ◆ JavaScript WordPress Java/C++
- ◆ Python

Application

- ❖ Visual Studio
- ❖ Google Collab
- ❖ Anaconda
- ❖ MySQL Workbench
- ❖ PyCharm
- ❖ PyTorch
- ❖ TensorFlow

Other Skills

- ❖ Team Work
- Leadership
- Communication

INTERESTS

- ✓ Listening Music
- ✓ Watching Movie
- ✓ Travelling
- ✓ Football
- ✓ Cricket

PROJECT

- ❖ Project 1: **Air Quality Monitor**
- ❖ Project 2: **Line Following Robot**
- ❖ Project 3: **Real-Time Human Detection and Tracking using Computer Vision**

PUBLICATIONS

[B] Title: **Water quality assessment through predictive machine learning**

Authors: Hritwik Ghosh, Mahatir Ahmed Tusher, Irfan Sadiq Rahat, Syed Khasim, Sachi Nandan Mohanty

Publish: International Conference on Intelligent Computing and Networking (Springer Nature Singapore)

DOI: https://doi.org/10.1007/978-981-99-3177-4_6

[J] Title: **A Study on the Application of Machine Learning and Deep Learning Techniques for Skin Cancer Detection**

Authors: Hritwik Ghosh, Irfan Sadiq Rahat, Sachi Nandan Mohanty, JVR Ravindra, Abdus Sobur

Publish: International Journal of Computer and Systems Engineering

[J] Title: **A Step Towards Automated Haematology: DL Models for Blood Cell Detection and Classification**

Authors: Irfan Sadiq Rahat, Mohammed Altaf Ahmed, Donepudi Rohini, A Manjula, Hritwik Ghosh, Abdus Sobur

Publish: EAI Endorsed Transactions on Pervasive Health and Technology

DOI: <https://doi.org/10.4108/ectpht.10.5477>

[J] Title: **Potato Leaf Disease Recognition and Prediction using Convolutional Neural Networks**

Authors: Hritwik Ghosh, Irfan Sadiq Rahat, Kareemulla Shaik, Syed Khasim, Manava Yesubabu

Publish: EAI Endorsed Transactions on Scalable Information Systems

DOI: <https://doi.org/10.4108/ects.3937>

[J] Title: **Deep Learning in Medical Imaging: A Case Study on Lung Tissue Classification**

Authors: Sandeep Kumar Panda, Janjhyam Venkata Naga Ramesh, Hritwik Ghosh, Irfan Sadiq Rahat, Abdus Sobur, Mehadi Hasan Bijoy, Manava Yesubabu

Publish: EAI Endorsed Transactions on Pervasive Health and Technology

DOI: <https://doi.org/10.4108/ectpht.10.5549>

[J] Title: **Advanced Deep Learning Models for Corn Leaf Disease Classification: A Field Study in Bangladesh.**

Authors: SN Mohanty, Hritwik Ghosh, Irfan Sadiq Rahat, CVR Reddy

Publish: MDPI Eng. Proc. 2023, 59, 69

DOI: <https://doi.org/10.3390/engproc2023059069>

[J] Title: **A Comparative Analysis of Machine Learning and Deep Learning Approaches for Prediction of Chronic Kidney Disease Progression**

Authors: Susmitha Mandava, Surendra Reddy Vinta, Hritwik Ghosh, Irfan Sadiq Rahat

Publish: EAI Endorsed Transactions on Internet of Things

DOI: <https://doi.org/10.4108/ectiot.5325>

[J]:Journal
[C]:Conference
[B]:Book

MEMBERSHIP

- Member in ICISML Conference Committee

CONFERENCE

- ❖ Participate in ICIRD(2024) conference in Thailand.
- ❖ Participate in iDEAAS(2024) conference in Malaysia.
- ❖ Participate in AMLDA(2023) conference in Germany.
- ❖ Participate in AIHC(2023) Conference in Slovakia.
- ❖ Participate in RAiSE(2023) conference in Dubai.
- ❖ Participate in ICISML (2023) conference in India.

HACATHON

- ❖ Participate in BYTE-BATTLES hackathon(2024) in VIT-AP University.
- ❖ Participate in CTECH & SRM TECH CODE hackathon(2024) in SRM University.

LANGUAGE

- **English:** Full Professional Proficiency
- **Bangla:** Native Language
- **Hindi:** Good

[J] Title: **Unraveling the Heterogeneity of Lower-Grade Gliomas: Deep Learning-Assisted Flair Segmentation and Genomic Analysis of Brain MR Images**

Authors: Irfan Sadiq Rahat, **Hritwik Ghosh**, Kareemulla Shaik, Syed Khasim, Gnanajeyaraman Rajaram

Publish: EAI Endorsed Transactions on Pervasive Health and Technology

DOI: <https://doi.org/10.4108/eetpht.9.4016>

[J] Title: **An All-Inclusive Machine Learning and Deep Learning Method for Forecasting Cardiovascular Disease in Bangladeshi Population**

Authors: Manjula Mandava, Surendra Reddy Vinta, **Hritwik Ghosh**, Irfan Sadiq Rahat

Publish: EAI Endorsed Transactions on Pervasive Health and Technology

DOI: <https://doi.org/10.4108/eetpht.9.4052>

[J] Title: **Deciphering Microorganisms through Intelligent Image Recognition: Machine Learning and Deep Learning Approaches, Challenges, and Advancements**

Authors: Syed Khasim, **Hritwik Ghosh**, Irfan Sadiq Rahat, Kareemulla Shaik, Manava Yesubabu

Publish: EAI Endorsed Transactions on Internet of Things

DOI: <https://doi.org/10.4108/eetiot.4484>

[J] Title: **Identification and Categorization of Yellow Rust Infection in Wheat through Deep Learning Techniques**

Authors: M Mandava, SR Vinta, **Hritwik Ghosh**, Irfan Sadiq Rahat

Publish: EAI Endorsed Transactions on Internet of Things

DOI: <https://doi.org/10.4108/eetiot.4603>

[J] Title: **Enhancing Agricultural Sustainability with Deep Learning: A Case Study of Cauliflower Disease Classification**

Authors: Nihar Ranjan Pradhan, **Hritwik Ghosh**, Irfan Sadiq Rahat, Janjhyam Venkata Naga Ramesh, Mannava Yesubabu

Publish: EAI Endorsed Transactions on Internet of Things

DOI: <https://doi.org/10.4108/eetiot.4834>

[J] Title: **Using Deep Learning and Machine Learning: Real-Time Discernment and Diagnostics of Rice-Leaf Diseases in Bangladesh**

Authors: Syed Khasim, Irfan Sadiq Rahat, **Hritwik Ghosh**, Kareemulla Shaik, Sujit Kumar Panda

Publish: EAI Endorsed Transactions on Internet of Things

DOI: <https://doi.org/10.4108/eetiot.4579>

[B] Title: **Cassava Syndrome Scan a Pioneering Deep Learning System for Accurate Cassava Leaf Disease Classification**

Authors: Irfan Sadiq Rahat, **Hritwik Ghosh**, Janjhyam Venkata Naga Ramesh, Ajmeera Kiran, Poonam Verma

Publish: International Conference on Applied Machine Learning and Data Analytics (Springer Nature Switzerland)

DOI: https://doi.org/10.1007/978-3-031-55486-5_9

[B] Title: **Benchmarking ML and DL Models for Mango Leaf Disease Detection: A Comparative Analysis**

Authors: **Hritwik Ghosh**, Irfan Sadiq Rahat, Rasmita Lenka, Sachi Nandan Mohanty, Deepak Chauhan

Publish: International Conference on Applied Machine Learning and Data Analytics (Springer Nature Switzerland)

DOI: https://doi.org/10.1007/978-3-031-55486-5_8

LEADERSHIP SKILLS

“Event Organizer and Leader, Machine Learning Club”

- ❖ GitCraft: Mastering GitHub
- ❖ How to Plan for Startups: Legal and Ethical Steps
- ❖ UI/UX Bootcamp
- ❖ Roadmap to Data Structures and Algorithms (DSA)
- ❖ DSA Boot Camp
- ❖ CodeHunt Hackathon
- ❖ Velocity Vortex
- ❖ AI Innovators Workshop: From Concept to Prototype
- ❖ Deep Learning Demystified: Hands-on with Neural Networks

[J] Title: Exploring the Potential of Deep Learning in the Classification and Early Detection of Parkinson's Disease

Authors: VS Bakkialakshmi, V Arulalan, Gowdham Chinnaraju, **Hritwik Ghosh**, Irfan Sadiq Rahat, Ankit Saha

Publish: EAI Endorsed Transactions on Pervasive Health and Technology

DOI: <https://doi.org/10.4108/eetpht.10.5568>

[J] Title: Exploring Deep Learning Models for Accurate Alzheimer's Disease Classification based on MRI Imaging

Authors: Irfan Sadiq Rahat, Tuhin Hossain, **Hritwik Ghosh**, Kamjula Lakshmi Kanth Reddy, Srinivas Kumar Palvadi, JVR Ravindra

Publish: EAI Endorsed Transactions on Pervasive Health and Technology

DOI: <https://doi.org/10.4108/eetpht.10.5550>

[J] Title: Convolutional Neural Networks in Malaria Diagnosis: A Study on Cell Image Classification

Authors: **Hritwik Ghosh**, Irfan Sadiq Rahat, JVR Ravindra, J Balajee, Mohammad Aman Ullah Khan, J Somasekar

Publish: EAI Endorsed Transactions on Pervasive Health and Technology

DOI: <https://doi.org/10.4108/eetpht.10.5551>

[J] Title: From Pixels to Pathology: The Power of CNNs in Detecting Tuberculosis

Authors: **Hritwik Ghosh**, Irfan Sadiq Rahat, MD Mehedi Hasan Nipu, Garigipati Rama Krishna, JVR Ravindra

Publish: EAI Endorsed Transactions on Pervasive Health and Technology

DOI: <https://doi.org/10.4108/eetpht.10.5543>

[C] Title: Innovative Approaches in Tomato Leaf Disease Recognition using Deep Learning

Authors: **Hritwik Ghosh**, Irfan Sadiq Rahat, Radha Mohan Pattanayak, Sachi Nandan Mohanty

Publish: IEEE XPLORE

DOI: [10.1109/ICRTAC59277.2023.10480762](https://doi.org/10.1109/ICRTAC59277.2023.10480762)

Accepted:

[J] Title: Enhancing Alzheimer's Disease Diagnosis with Deep Learning: A Cnn Approach Utilizing Extensive Mri Data for Stage Classification

Authots: P Pavan Kumar, Irfan Sadiq Rahat, **Hritwik Ghosh**, Abdus Sobur, Md. Mintajur Rahman Emon, Asif Ahammad Miazee

Submit: Proceedings on Engineering Sciences

[J] Title: A Novel CNN Model for the Precise Identification of Mango Leaf Pathologies

Authors: **Hritwik Ghosh**, Irfan Sadiq Rahat, Nihar Ranjan Pradhan, Abdhus Sobur, Sachi Nandan Mohanty

Submit: ES Food and Agroforestry

[B] Title: Beyond Traditional Methods: Cassava Syndrome Scan and Deep Learning in Leaf Disease Analysis

Authors: Irfan Sadiq Rahat, **Hritwik Ghosh**, M.V.Sangameswar, Radha Mohan Pattanayak

Submit: 4th International Conference on Machine Learning, IoT and Big Data (ICMIB2024)

REFERENCES

Dr.Sachi Nandan Mohanty
Professor,Dept. of SCOPE
VIT-AP University
Amaravati,Andhra Pradesh,India
Cell:+919437322121
E-mail:sachinandan09@gmail.com

Dr.Syed Khasim
Professor,Dept. of SCOPE
VIT-AP University
Amaravati,Andhra Pradesh,India
Cell:+918328361988
E-mail:profkhasim@gmail.com

Dr.P.Pavan Kumar
Professor,Dept. Of AI & DS
IFHE, Hyderabad, India
Cell:+918977140144
E-mail:pavanpk@ifheindia.org

Dr.Mohammed Altaf Ahmed
Professor,Dept. of Computer &
Engineering
Prince Sattam Bin Abdulaziz
University
Al-Kharj 11942, Saudi Arabia
Cell:+966503481396
E-mail:m.altaf@psau.edu.sa

Carlin Pouamou
Professor,Dept. of VISH
VIT-AP University
Amaravati,Andhra Pradesh,India
Cell:+918328361988
E-mail:carlin.pouamou@vit.ac.in

[C] Title:**Advancements in Potato Leaf Disease Detection: A CNN Approach in Bangladesh's Agricultural Landscape**

Authors:**Hritwik Ghosh**,Md Zakir Hossain,Irfan Sadiq Rahat,Abdus Sobur,Mohammed Altaf Ahmed,QS Tameem Naz

Submit:1st International Conference on Augmented Reality, Intelligent Systems, and Industrial Automation

[C] Title:**Deep Learning-Based Classification of Rice Varieties for Agricultural Applications**

Authors:Irfan Sadiq Rahat, **Hritwik Ghosh**, Md Al Adnan, Md Mehedi Hasan Nipu, Mohammed Altaf Ahmed, QS Tameem Naz

Submit:1st International Conference on Augmented Reality, Intelligent Systems, and Industrial Automation

Under Review:

[J] Title:**Microbial Image Analysis: Addressing Challenges with Machine Learning and Deep Learning Techniques**

Authors:**Hritwik Ghosh**, Irfan Sadiq Rahat, Shashi Kant

Submit:Discover Artificial Intelligence

Submitted:

[J] Title:**Convolutional Neural Networks for Automated Pneumonia Diagnosis from Chest X-rays**

Authors:Irfan Sadiq Rahat, **Hritwik Ghosh**,Shashi Kant

Submit:Discover Artificial Intelligence

[J] Title:**Advanced Neural Network Architectures for Tomato Leaf Disease Diagnosis in Precision Agriculture**

Authors:**Hritwik Ghosh**, Irfan Sadiq Rahat, Md. Mintajur Rahman Emon, Shashi Kant

Submit:Discover Sustainability

CERTIFICATIONS

● **Data Science and Advanced Analytics**

Department of Computer Science and Engineering, VIT-AP University, India, Duration: 30 hours, 27-06-2022 to 22-07-2022

● **Optimization Problems and Algorithms**

(by Professor Syedali Mirjalili, Udemy, year 2020)

● **Machine Learning A-Z™: Hands-On Python & R In Data Science**

(by Super Data Science Support, Ligeny Team, Hadelin de Ponteves, Kirill Eremanko, Udemy, year 2021)

● **Python workshop by Adam Zaini (data scientist at ExxonMobil)**

IchemE student chapter, UTP, Malaysia. Duration: Two days, year 2021

● **“One Day National Workshop on “Role of Machine Learning in Cosmology”**

School of Computer Science and Engineering (SCOPE) and School of Advanced Sciences (SAS), VIT-AP University, year 2022

● **“Foreign Guest Lecture on "5.0 Industrial Revolution"**

School of Computer Science and Engineering, VIT-AP University, Amaravati, Date: 9th July 2022