Dr. TANMOY HAZRA
(Assistant Professor, Department of Artificial Intelligence, SVNIT Surat)

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SVNIT Surat, Ichchhanath, Keval Chowk, Surat
– 395007, Gujarat, INDIA

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Academic Records:
- **Ph.D.:** Defence Institute of Advanced Technology, Pune (DRDO)
- **M.Tech.:** IIT-ISM Dhanbad
- **B.Tech.:** West Bengal University of Technology

Professional Experience:
- Assistant Professor (Grade I, Level 12) in the Department of Artificial Intelligence, IIIT Pune, Oct 2023 – till date.
- Assistant Professor (Grade II, Level 11) in the Department of Computer Science and Engineering, IIIT Pune, Jan 2022 - Oct 2023
- Assistant Professor (Grade II, Level 10) in the Department of Computer Science and Engineering, IIIT Pune, Jul 2019 - Jan 2022
- Assistant Professor (Temporary) in the Department of Computer Science and Engineering, IIIT Pune, Feb 2018 – Jul 2019

Achievements:
- National merit certificate based on the performance of secondary examination
- GATE qualified in 2010 (96.6 percentile)
- Ph.D. institutional fellowship funded by the ministry of defence
- Best Paper Award in 3rd ICACCS, Coimbatore, 2016.

Research Interests:
Machine Learning, Deep Learning, Applications of Game Theory

Publications:
Journals
- P. Nimbhore, R. Tiwari, T. Hazra, M. Yadav, Classification of Cotton Crop Disease using Hybrid Model and MDFC feature extraction method, Journal of Phytopathology, 2024 **(SCIE)** [Accepted]
- S. Todmal, A. Mule, D. Bhagwat, T. Hazra, B. Singh, Human face generation from textual description via style mapping and manipulation, Multimedia Tools and Applications, 2022 **(SCIE)**
- U. Kalra, A. Kumar, T. Hazra, Intelligent mobile vending services: Location optimisation for food trucks using coalitional game theory, Multimedia Tools and Applications, 2022 **(SCIE)**
- T. Hazra, K. Anjaria, Applications of game theory in deep learning: A survey, Multimedia Tools

and Applications, 2022 **(SCIE)**

- T. Hazra, K. Anjaria, Analysis and Applications of a Bridge Game, Journal of Ambient Intelligence and Humanized Computing, 2021 **(SCIE)**
- T. Hazra, M. Nene and C. R. S. Kumar, A Strategic Framework for Searching Mobile Targets Using Mobile Sensors, Wireless Personal Communications, 2017 **(SCIE)**
- T. Hazra, C. R. S. Kumar and M. Nene, Modeling and Analysis of Grid-Based Target Searching Problems in a Mobile Sensor Network, Wireless Personal Communications, 2017 **(SCIE)**
- T. Hazra, C. R. S. Kumar and M. Nene, Multi-agent target searching with time constraints using game-theoretic approaches, Kybernetes, 2017 **(SCIE)**
- P. Rawat, T. Hazra and B. Singh, Vehicle detection under tunnel using background subtraction technique, European Chemical Bulletin, 2023 **(Scopus)**
- T. Hazra, M. Nene and C. R. S. Kumar, Modelling and analysis of information-based target searching using mobile sensors, IJSCC, 2017 **(Scopus)**
- T. Hazra, C. R. S. Kumar and M. Nene, Two-agent cooperative search model using Petri-nets, IJIUS, 2018 **(Scopus)**
- P. Nimbhore, M. Yadav, R. Tiwari and T. Hazra, A survey of cotton crop disease detection and classification using ORC-NET segmentation and deep learning models, Industrial Engineering Journal, 2024
- T. Hazra, M. Nene and C. R. S. Kumar, A probabilistic approach to compute strategies for players of a search game in a bounded space, CSI Transactions on ICT, 2017
- T. Hazra, C. R. S. Kumar and M. Nene, Strategies for Searching Targets Using Mobile Sensors in Defence Scenarios, IJITCS, 2016
- H. Om, T. Hazra, Design of Anomaly Detection System for Outlier Detection in Hardware Profile Using PCA, International Journal in Computer Science and Engineering, 2012
- H. Om, T. Hazra, Statistical Techniques in Anomaly Intrusion Detection System, International Journal of Advances in Engineering and Technology, 2012

Conferences
- S. Todmal and T. Hazra, Text guided image manipulation using LiT and StyleGAN2, 3rd ICCMI (IEEE), USA, 2024
- K.N. Sai, R. Lekhwani, B. Singh and T. Hazra, Modeling and Predicting the COVID-19 Trajectory in India, 7th I2CT (IEEE), Pune, 2022
- T. Hazra, M. Nene and C. R. S. Kumar, Optimal strategies for searching a mobile object using mobile sensors in a grid environment, 3rd ICACCS (IEEE), Coimbatore, 2016. **(Best Paper Award)**
- T. Hazra, C. R. S. Kumar and M. Nene, Strategies for Searching a Mobile Target Using Mobile Sensors in a Two-Dimensional Grid , 2nd I2CT (IEEE), Pune, 2017

Books
- Tanmoy Hazra, Kushal Anjaria, Aditi Bajpai, Akshara Kumari, Applications of game theory in deep learning, Springer, 2024
- Tanmoy Hazra, Application of PCA in IDS, Lambert Academic Publishing, 2012

Sponsored Project:
Title: Power and Space Optimization in Internet of Things (IoT) System-on-Chip
Scheme: Chips to Startup
Funding Agency: MeitY
Role: Other Investigator
Sanctioned amount: Rs. 81.6 Lakhs
Status: Ongoing

Consultancy Project:
Participated as a member in a project titled "Water footprint of Dairy sector in India: An analysis of water requirement, production, profitability, and conservation" sponsored by Dr. Verghese Kurien Centre of Excellence with Rs. 4.70 lakhs in association with Institute of Rural Management Anand from September 2021 to March 2022.

Reviewer:
- IEEE Access since 2019
- Wireless Personal Communications (Springer) since 2017
- Security and Privacy (Wiley)
- Kybernetes (Emerald) since 2017
- IJSCC (Inderscience) since 2017
- IJISD (Inderscience) since 2017

Organizing Conferences:
General Chair, International conference on Artificial Intelligence for Resilient Happy Society 2022

Technical Program Committee:
- ICCI-2020, Organized by IIIT Pune
- ICCI-2021, Organized by IIIT Pune
- MISP-2021, Organized by NIT Arunachal Pradesh
- MIND-2021, Organized by NIT Raipur
- CVMI-2022, Organized by IIIT Allahabad
- CLIP-2022, Organized by NIT Trichy

Technical Information:
Language: C, C++, Python, MATLAB, Java
Tools: Latex, GameTheoryExplorer, lrslib, wiresherk
Operating System: Windows family, LINUX (basics)

Courses Offered:
- Object Oriented Programming (C++) [UG]
- Machine Learning [UG+PG]
- Introduction to Programming Language [UG]
- Data Structure [UG]
- Design and Analysis of Algorithms [UG]

Key Academic and Administrative Responsibilities:
- Member, Career Development Cell of the Institute, SVNIT since April 2024
- Member, Departmental Purchase Committee, SVNIT Surat since October 2023
- AI Department PhD Incharge, SVNIT Surat since November 2023.
- Coordinator, Department Student Grievance Committee, SVNIT Surat since July 2024
- Member, Board of Studies, School of Mathematics and Computer Science, DIAT since 2023
- Senate nominated Member of Board of Governors of IIIT Pune since January 2022 to October 2023.
- Member of Senate of IIIT Pune since November 2019 - April 2022
- Head of the Department, CSE, IIIT Pune from October 2019 - October 2022

- Deputy Centre In-charge in JoSAA admission process (2019)
- Institute Coordinator for DASA 2021, 2022 & 2023
- Member of Purchase Committee of IIIT Pune from 2019 to 2022
- Member of Moderation committee since December 2019 to October 2023
- Member of Anti-ragging committee since December 2019 to 2022
- Member of T&P cell (2019-2020)
- In-charge of examination cell, IIIT Pune (August 2018 to November 2018)
- Coordinator of FDP on Data Science and Machine Learning held on 20-24 December 2021
- Coordinator of ATAL Sponsored FDP on Data Science held on 20-24 December 2021
- Conducted NNSC Workshop in ISB&M School of Technology, Pune (2012)

Lecture Series/Invited Talk:
- Guest lecture on "Applications of discrete mathematics in computer science" in DYPIEMR, Pune (2016)
- Delivered lectures on Machine Learning for the students and faculty members of CSVTU, Bhilai from 13/9/2020 to 17/9/2020, CSVTU, Bhilai, 5 days (24 Hours) Short-term Training Programme
- Delivered an invited talk in the ATAL FDP on "Immersive Virtual Reality" organized by Defence Institute of Adavnced Technology Pune from 5/10/2020 to 9/10/2020
- Delivered an invited talk on "Mathematical Modelling and Machine Learning" organized by MIT ADT Univeristy Pune on 17/10/2020
- Delivered lectures on Game Theory and Applications for the faculty members of CSVTU, Bhilai from 2/12/2020 to 3/12/2020, CSVTU, Bhilai, 2 days (8 Hours) Faculty Development Programme
- Delivered an invited talk in the Workshop on "Machine Learning- Concepts and Applications" organized by NIT Trichy from 19/4/2021 to 23/4/2021
- Delivered an invited talk in the ATAL FDP on "Data Science: Applications and Research Directions" organized by Atal Bihari Vajpayee University, Bilaspur 5/7/2021 to 9/7/2021
- Delivered an invited talk in 10 days Training Programme for Navy Officers organized by Defence Institute of Advanced Technology Pune on 29/9/2021
- Delivered an invited talk in 10 days Customized Course in Cyber Security for Navy Officers organized by Defence Institute of Advanced Technology Pune on 6/5/2022
- Delivered an invited talk in the AICTE and ISTE sponsored online induction/ refresher programme "Data Science and It's Applications" organized by Abha Gaikwad-Patil College of Engineering, Nagpur 30/12/2021 to 5/1/2022
- Delivered Keynote on 3rd International Conference on Information Technology (InCITe 2023), organized by Amity University Noida, 2nd - 3rd March, 2023.
- Delivered an invited talk on "Deep learning for research: Understanding deep learning concepts, applications of deep learning in research, practical implementation of deep learning algorithms" in the FDP for STEM Professionals on Advancing Research methodology through Scientific Tools and Artificial Intelligence from 5/2/2024 to 9/2/2024.
- Delivered an invited talk on "AI & ML applications in industries" in 5 days FDP organized by Anand International College of Engineering from 15-19 April 2024.
- Serving as a Track Chair in 11th International Conference on Mathematics and Computing (ICMC 2025) to be organized by IIT Bhilai.

Examiner/Paper Setter:
- Ph.D. Thesis Evaluation of CSVTU, Bhilai, June 2024
- Ph.D. Thesis Evaluation of SRU, Chennai, May 2024
- Ph.D. Thesis Evaluation of VTU, August 2021

- External examiner of MTech Project Evaluation at IIIT Allahabad, 2021 & 2022
- External expert for JRF recruitment at IIIT Pune, June 2022
- External examiner of BTech Subject Oral Examination at COE, Pune 2021
- Question setter of BTech Theory Examination at COE, Pune 2020
- Question setter of BTech Theory Examination at MITADT University, Pune 2019, 2020, 2021

Personal Details:

Father's Name	: Mr. Dilip Kumar Hajra
Date of Birth	: 1.1.1988
Sex	: Male
Nationality	: Indian
Religion	: Hindu
Permanent Address	: Vill + P. O. + P. S.- Patrasayer
	Dist- Bankura
	West Bengal
	Pin-722206
Language Known	: Bengali, English, Hindi
Strength	: Punctuality, Responsibility, Positive Attitude, Patience
Interest	: Teaching, Net Surfing, Listening Music, Playing Cricket