



RATUL CHOWDHURY

(B. TECH-CSE, M. TECH-CSE, AND PH.D.- CSE FROM UNIVERSITY OF CALCUTTA)

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SUMMARY As a recent Ph.D. graduate in Computer Science and Engineering, my career goal is to contribute to academia as an Associate Professor, fostering a dynamic learning environment and advancing research in various leading domain. My long-term aspiration is to establish myself as a leading researcher and educator, driving innovation and collaboration in the field.

SKILLS

- Operating system
- Data structure and Algorithm
- Database management system
- Computer organization
- Formal language and Automata theory
- SQL (Oracle, MY-SQL), Python
- Cryptography
- Data science, Machine learning

EXPERIENCE

Possess 10 years of experience at various eminent institutions in Kolkata.

ASSISTANT PROFESSOR, 18/09/2024 - Present, **Swami Vivekananda Institute of Science and Technology**, Kolkata

ASSISTANT PROFESSOR, 02/2016 – 17/09/2024, **Future Institute of Engineering and Management**, Kolkata

ASSISTANT PROFESSOR, 01/2015 - 01/2016, **Institute of Engineering and Management**, Kolkata

EDUCATION

UNIVERSITY OF CALCUTTA, Kolkata, in 03/2024
Ph.D.: COMPUTER SCIENCE & ENGINEERING
Thesis: Security for System Component based on System Anatomy

UNIVERSITY OF CALCUTTA (RAJABAZAR SCIENCE COLLEGE), 2014
MASTER OF TECHNOLOGY IN COMPUTER SCIENCE & ENGINEERING
Percentage: 75.22% (First Class)

UNIVERSITY OF CALCUTTA (RAJABAZAR SCIENCE COLLEGE), 2012
POST B.SC B. TECH IN COMPUTER SCIENCE & ENGINEERING
CGPA: 7.71 (First Class)

SAMMILANI MAHAVIDYALAYA, UNIVERSITY OF CALCUTTA, 2009
B.SC IN COMPUTER SCIENCE
Percentage: 70% (First Class)

RAJPUR VIDYANIDHY HIGH SCHOOL, W. B.C.H.S. E, 2005
HIGHER SECONDARY
Percentage: 70.02%

R.K. MISSION SIKSHA MANDIR SARISHA, W.B.B.S.E, 2003
SECONDARY
Percentage: 75.75%

PUBLICATIONS

1. Chowdhury, R., Sen, S., Goswami, A., Purkait, S. and Saha, B., 2023. An implementation of bi-phase network intrusion detection system by using real-time traffic analysis. **Expert Systems with Applications**, **224**, p.119831. (SCIE)
2. Chowdhury, Ratul, Shibaprasad Sen, Arindam Roy, and Banani Saha. "An optimal feature-based network intrusion detection system using bagging ensemble method for real-time traffic analysis." **Multimedia Tools and Applications** 81, no. 28 (2022): 41225-41247. (SCIE)
3. Chowdhury, Ratul, Tamal Chakraborty, Shankhadeep Purkait, and Banani Saha. "SE2CURA-design and implementation of a robust ensemble learning based 2-tier intrusion detection system for real time traffic." **Multimedia Tools and Applications** (2023): 1-43. (SCIE)
4. Chowdhury, Ratul, Debnath Bhattacharyya, Samir Kumar Bandyopadhyay, and Tai-Hoon Kim. "A view on LSB based audio steganography." **International Journal of Security and Its Applications** 10, no. 2 (2016): 51-62. (ESCI)

5. Barman, Prakash, Ratul Chowdhury, Tamal Chakraborty, Arpan Goswami, Sayak Saha, and Banani Saha. "SRF2T-ID:An Implementation of Ensemble Learning-Based IDS with Wireless of Things Secure Communication for Smart Residency Environment" **peer-to-peer Networking and Applications(SCIE)**(Under review)
6. Chowdhury, Ratul, Arindam Roy, Banani Saha, and Samir Kumar Bandyopadhyay. "A step forward to revolutionize intrusion detection system using deep convolutional neural network." In **Data Driven Approach Towards Disruptive Technologies: Proceedings of MIDAS 2020**, pp. 337-352. Springer Singapore, 2021.
7. Chowdhury, R., Roy, A., Saha, B. and Bandyopadhyay, S.K., 2022. An Intelligent Intrusion Detection System Using a Novel Combination of PCA and MLP. In **Engineering Mathematics and Computing** (pp. 93-104). Singapore: Springer Nature Singapore.
8. Barman, Prakash, Ratul Chowdhury, Banani Saha,"Multi-Channel Secure Communication Framework for Wireless IoT (MCSC-WoT): Enhancing Security in the Internet of Things", **Cluster Computing(SCIE)**(Under review)
9. Chowdhury, R., Das, K.G., Saha, B. and Bandyopadhyay, S.K., 2020. A method based on NLP for twitter spam detection (Preprint)

FDP/CERTIFICATION

1. Five days FDP on Recent Trends and Advancement in ML and NLP from 12th-17th July,2023 organized by Department of Computer Science and Engineering, Narula Institute of Technology.
 - 2.Five days FDP on Cyber Security and Blockchain Technologies from 25th-29th July, 2022 organized by AIITK.
 3. Five days FDP on Achieving Excellence in Teaching, Research and Commercialization from 19th-23th July, 2021 organized by Amity Institute of Information Technology.
 4. Five days FDP on Recent Advances of Machine Learning and its Application from 23rd-27th June, 2020 organized by Amity Institute of Information Technology.
 5. Presently enrolled in one-year Full Stack Data Science Pro course conducted by PW SKILLS.
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OTHER

RESPONSIBILITIES

- **Teacher-in-Charge**
Acting as the teacher-in-charge of the CSE department, overseeing academic activities, coordinating with faculty, and managing departmental resources.
- **Departmental Placement Coordinator**
Serving as the departmental placement coordinator, facilitating placement opportunities for students, liaising with companies, and organizing placement drives.

- Project Committee Convenor
Convenor of the project committee, responsible for guiding student projects, organizing project reviews, and ensuring the successful completion of departmental projects.
 - Active Reviewer for SCI-Indexed Journals
Engaged as an active reviewer for various SCI-indexed journals, including:
 - Journal of Supercomputing
 - Peer-to-Peer Networking and Applications
 - International Journal of Information Security
 - Scientific reports
 - Cluster computing
 - International Journal of Machine Learning and Cybernetics
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REFERENCES

1. Dr. Banani Saha
Associate Professor, Department of Computer Science and Engineering,
University of Calcutta (Technology Campus)
Contact :bsaha_29@yahoo.com, 9433130715
2. Dr. Sunirmal Khatua
Assistant Professor Department of Computer Science & Engineering
University of Calcutta (Technology Campus)
Contact: skhatuacomp@caluniv.ac.in, 9874872149