

Dr. MD ASRAR AHMED

Senior Member, ACM.

Ph.D. (CSE) Under Visvesvaraya PhD Scheme, MEITY, Govt of India.

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Research Interest:

My primary research interests lie in computations on encrypted data while preserving privacy of such outsourced data in cloud. In my recent works, as part of my doctoral studies, proposed several efficient, dynamic and forward private search operations on encrypted data with support for query expressiveness and update operations. I am presently exploring usability of proposed schemes in personal healthcare applications by considering multi-user setup.

Professional Summary:

- Experience of 15+ Years in the field of Teaching
- Working as:
 - Assistant Professor, CS & AI Department, since July 2024.
 - Assistant Professor, Information Technology Department, MJCET, from September 2013 to September 2024.
 - Assistant Professor, Computer Science and Engineering Department, MJCET, from January 2009 to September 2013
- Placements Coordinator, IT Department, MJCET
- Member – Department Advisory Board, Program Assessment Committee, NPTEL Committee, and Placements Committee at MJCET
- **Ph.D. in Computer Science and Engineering** from Osmania University, **M. Tech. (CSE)** from Osmania University, and **MCA** from Osmania University.

Academics:

Ph.D. (CSE), 2023

Under **Visvesvaraya PhD Scheme**, Ministry of Electronics and IT, Government of India
(File No: **PhD-MLA-4(63)/2015-16**)

Thesis Title: **Privacy Preserving Efficient and Dynamic Searchable Encryption Schemes on Outsourced Encrypted Data**

Supervisor: **Prof. S. Ramachandram**, Former Vice Chancellor, Osmania University.

M. Tech. (CSE) – Osmania University – 85% (2012)

M.C.A. – Osmania University – 74% (2008)

Membership of Professional Societies:

Senior Member – ACM (2020 onwards)

Member ACM – (2014 – 2020)

Life Member – Computer Society of India

Academic Honors and Distinctions:

Wipro Certified Faculty in Java Full Stack – Aug 2023

GATE 2010 qualified with 94% (8012 AIR).

PGECET 2010 – 2nd Rank in the state of Andhra Pradesh.

JNTUH PTPG Entrance Test 2010 – 1st Rank in state of Andhra Pradesh.

UGC NET 2013 – Qualified (for Assistant Professor)

TS SET 2017 – Qualified.

NPTEL: Discrete Mathematics, Java Programming Courses 2019 - (Gold Medal)

Coursera Certifications: Python Programming and Python Data Structures

Responsibilities Held:

Associate Head, Computer Science & Artificial Intelligence Department, since July 2024.

Campus Placements In-charge for B.E. (IT) Course

Organizing Committee Member – IEEE CIS Summer School 2018 on “Computational Intelligence – Theory, Implementation & Practices”, 22-27-Nov 2018

Organizing Committee Member – One-week STTP on “Data Science Applications and Practices in R”, 13-18 Dec 2017

ACM-MJCET Students Professional Chapter Advisor – 2016 to 2018

MJCET Annual Reports, Institute Brochures, Annual Presentations for Inspections, etc.

Designed and developed an Assessment Matrix in MS. Excel for assessment of course outcomes for NBA and NAAC. (Present version AM-05)

Member – Department Advisory Board, Program Assessment Committee, NPTEL Committee, Placement Committee, Institutional Ranking Committee at MJCET

Research Publications:

1. An Efficient Forward and Backward Private Multi-Key Ranked Searchable Encryption Scheme, Ahmed, M.A., Ramachandram, S., Security and Privacy, Wiley Journal. (Under Review)

2. A forward and backward secure conjunctive keywords dynamic searchable encryption scheme Ahmed, M.A., Ramachandram, S., Khan, K.U.R. International Journal of Internet Technology and Secured Transactions, 2022, 12(3), pp. 205–229. (Scopus Indexed)
3. Conjunctive Keyword Forward Secure Ranked Dynamic Searchable Encryption Over Outsourced Encrypted Data - Ahmed, M.A., Ramachandram, S., Khan, K.U.R. Communications in Computer and Information Science, 2021, 1364, pp. 197–212 (Scopus Indexed)
4. Privacy Preserving Semantic-Aware Multi-keyword Ranked Dynamic Search Over Encrypted Data - MD Asrar Ahmed, S Ramachandram, Khaleel Ur Rahman Khan, 2020 Smart Computing Techniques and Applications: Volume 1, Pages 655-664, Springer Singapore. (Scopus Indexed)
5. Privacy Preserving Dynamically Indexed Multi-Phrase Search over Encrypted Data - Ahmed, A. , Ramachandram, S., Rahman Khan, K.U. 2018 International Conference on Advances in Computing, Communications and Informatics, ICACCI 2018, 2018, pp. 350–356, 8554618 (Scopus and WoS indexed)
6. Trust based secure gateway discovery mechanism for integrated internet and MANET- Asrar Ahmed, M., Khan, K.U.R. Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics), 2013, 7753 LNCS, pp. 103–114. (Scopus Indexed)
7. Effective layer-3 protocols for integrating mobile ad hoc network and the Internet - Khan, K.U.R., Zaman, R.U., Reddy, A.V., Ahmed, M.A. Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics), 2009, 5408 LNCS, pp. 377–388 (Scopus Indexed)
8. A hybrid architecture for integrating mobile ad hoc network and the internet using fixed and mobile gateways - Rahman Khan, K.U., Ahmed, M.A., Reddy, A.V., Zaman, R.U. 2008 1st FIP Wireless Days, WD 2008, 2008, 4812876. (Scopus Indexed)

Courses Offered:

- Data Structures
- Design and Analysis of Algorithms
- Java Programming
- Programming in C and C++
- Discrete Mathematics and Mathematical Foundations of Information Technology
- Operating Systems
- Software Reuse Techniques
- Software Engineering
- Object Oriented System Development
- Computer Organization and Architecture

Technical Skills:

Languages: C, C++, Java (Hibernate, Spring, Spring Boot, JSP, JDBC, etc), Python, R, etc.

Operating Systems: Linux, Microsoft Windows.

Programs (FDPs / Workshops / Seminars) Attended:

1. Two days National Workshop on **NIRF India Ranking – 2022** held on 05-01-2022 to 06-01-2022, by **Institute for Academic Excellence** in collaboration with **Collegiate Education and Technical Education Department, Government of Telangana**.
2. **Attended Two-day Online Awareness Workshop on Improving Research and Performance Outcomes**, on 30-31 August 2021, organized by Elsevier's Research Academy.
3. **Three-day IEEE GRSS Summer School on “AI in Remote Sensing Applications”**, held from 21-23 Oct 2021.
4. **One week International Online FDP on “Recent Advances in Computer Science and Allied Domains – RACSAD-II 2020”**, held from 23-28 Nov, 2020, at Sharda University, Nodia
5. **ATAL Online One Week FDP on “IoT with Edge Computing”** from 14-09-2021 to 18-09-2021 at University College of Engineering, Osmania University.
6. **ATAL Online FDP on “Computational foundation for Data Science”**, from 26-07-2021 to 30-07-2021, at Banaras Hindu University, Varanasi.
7. **ATAL Online FDP on “Artificial Intelligence and Machine Learning (AI&ML-2021)** from 05-07-2021 to 09-07-2021 at College of Engineering and Technology Bhubaneswar
8. **Two Days “Awareness Workshop on NIRF India Rankings – 2021 for Higher Educational Institutions”** held on 18-01-2021 to 19-01-2021, by Institute for Academic Excellence in collaboration with Collegiate Education and Technical Education Department, Government of Telangana.
9. Completed a **One-day** webinar on **“Deep Learning – Algorithms, Use cases, and Industry Applications”**, on 12-06-2021, organized by **ACM Hyderabad Deccan**.
10. **One Week FDP on “Computational Intelligence – Techniques, Tools and Applications”** from 06-11 Jan 2020, at CSED, MCJET.
11. Completed a **12-week NPTEL Course on “Foundations of Cryptography”** held from Jan-Apr 2020, course offered by **IIIT Bangalore**. (with 54% score). (1 ½ FDP)
12. **Seven Weeks Online Course** offered by University of Michigan through Coursera titled **“Python Data Structures”**, on 21-04-2020 with a certificate and grade of 74%.
13. **Seven Weeks Online (Self-paced) Course** offered by University of Michigan through Coursera titled **“Programming for Everybody (Getting Started with Python)** on 10-04-2020 with a certificate and grade of 82.66%.
14. **A One-day workshop on “Kick-start your Research Work”** on 30-05-2020, organized by CSED of Jain University, Bangalore.
15. **One Week National Level Workshop on “Azure Serverless Computing”** organized by **Mahatma Gandhi Institute of Technology**, in association with Wilma Technologies, from 10-08-2020 to 14-08-2020.
16. **International Workshop on Deep Learning** from 22-08-2020 to 26-08-2020, organized by BITS Pilani, Hyderabad Campus
17. **One Day International Workshop on “Angular JS To Develop Web Apps Faster”**, conducted on 26-06-2020, organized by ITD of G. Narayanamma Institute of Technology and Science (for Women).
18. Three-day workshop titled **“ Workshop for Presentations of Research Work of Visvesvaraya PhD Scholars”** during 17-19 July 2019, at Punjab Engineering College, Chandigarh.
19. Completed a **12-Week Online Course on “Discrete Mathematics”** with **91%** consolidated score and a **Gold Medal**, from July-Oct 2018, offered by **IIT Ropar**.
20. Completed a **12-Week Online Course on “Programming in Java”** with **94%** consolidated score and a **Gold Medal**, from Jan-Apr 2019, offered by IIT Kharagpur
21. **6-day IEEE CIS Summer School 2018 on “Computational Intelligence: Theory, Implementations and Application”**, from 22-27 Nov 2018, at MJCET
22. **Two-day workshop titled “ Research Workshop 2018”**, from 23-24 June 2018, organized by CSED of JNTU Hyderabad in association with IEEE Young Professionals Hyderabad and WIE
23. **One Week Short Term Training Program on “Data Science Applications and Practices in R”**, from 13-18 December 2017 at MJCET
24. **One Day Workshop on “Game Theory with Applications to Security”** on 06th Oct 2017, at ITD, MJCET

25. **Two-day National level Workshop on “Practical Machine Learning and Data Science – PMLEADS”** on 17-18 Oct 2016, at CSED, UCE, Osmania University
 26. **One Week FDP on “Cryptography and Its Applications”** from 19-23 Dec 2016, at CSED, UCE, Osmania University
 27. **Three-day National Workshop on “Big Data Analytics”** held from 15-17 Dec 2014, organized by ITD, MJCET
 28. **Completed Training in IBM SEED Program, organized by IBM for “Rational Software Architect”**, from 26-28 June 2014, at MJCET
 29. **A National Workshop on Mathematical Technology**, from 27-06-2014 to 28-06-2014 organized by Department of Mathematics, MJCET
 30. **Two-day National Workshop on “Notable Trends in Current Computer Science and Engineering Research”** from 30-31 Jan 2013, organized by CSED, MJCET
 31. **Two-Week ISTE Workshop on “Introduction to Research Methodologies”** conducted by IIT Bombay, from 25th June to 4th July 2012, under National Mission on Education through ICT (MHRD), at MJCET Remote Centre
 32. **Two-day ISTE Workshop on “Aakash For Education”** conducted by IIT Bombay, on 10th and 11th November 2012, under National Mission on Education through ICT (MHRD), at MJCET Remote Centre.
 33. **Two-day National Workshop on “Cloud Computing and Security Issues”**, held during 12-13 July 2012, organized by CSED, UCE, OU and CipherCloud India Pvt Ltd
 34. **One-day Workshop on “Information Security Education Awareness”** organized by CDAC at ITD MJCET, on 28th July 2012
 35. **Certificate of Excellence** in recognition of contribution as **Teaching Assistant** in successful completion of **Two week ISTE Workshop on “Software Development Techniques for Teachers of Engineering and Science Institutes”** conducted by IIT Bombay from 5th Nov to 4th Dec 2011, under NMEICT, MHRD, at MJCET Remote Centre.
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Declaration: I hereby declare that the information furnished above is correct and accurate to the best of my knowledge.

Date: 10 October 2024.

Dr. MD Asrar Ahmed.