

Dr. Mohammed Mahmood Ali



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EDUCATION

1. PhD(Computer Science& Engineering) from Osmania University, Hyderabad – August 2017

Dissertation Topic - “*Framework for surveillance of instant messages*”

Advisor: Prof. Lakshmi Rajamani, CSED, UCE, OU

2. M.Tech (CS) from JNTU – January 2008 – 75% (Distinction)
3. A.M.I.E (CSE) from Institution of Engineers(India), Hyderabad –September 2004 – Grade-A
4. Polytechnic (CSE) from State board of Technical Education, Hyderabad – March 1999 – 70%
5. Intermediate (CSE) from SBTET (Vocational) – April 1997 – 80%.

1. Google scholar indexing:

https://scholar.google.com/citations?hl=en&user=7RhQUS4AAAAJ&view_op=list_works&sort_by=pubdate;

h-index = 9; citations = 273; i10 index = 8;

2. Web of science (WOS) indexing:

<https://publons.com/researcher/3212029/mohammed-mahmood-ali/metrics/>

3. Scopus indexing:

<https://www.scopus.com/authid/detail.uri?authorId=55270137100>

h-index = 6; citations = 96;

ACADEMIC EXPERIENCE (MAJOR)(17+ YRS)

M J COLLEGE OF ENGG & TECH., Hyderabad - India

Associate Professor. – October 2017 – Currently Working

Assistant Professor, CSE Dept. – June 2009 – September 2017

UNIVERSITY COLLEGE OF ENGG., Hyderabad - India

Academic Consultant CSE Dept. – July 2008 – May 2009

SHADAN COLLEGE OF ENGG & TECH., Hyderabad - India

Assistant Professor, CSE Dept. – Jan 2005 – July 2008

ACADEMIC EXPERIENCE(MINOR), Hyderabad - India

Prof. G. Ram Reddy Centre for Distance Education, Adjunct Faculty
July 2008 – August 2009

PROFESSIONAL SERVICE

- Recognized PhD Supervisor of Osmania University - Hyd.
- Presently supervising 4 Research Scholars in Ph.D.

- Over 17+ Years of Academic Teaching in Engineering & Technology.
- Leading role in preparation for and execution of the process of NAAC & NBA accreditation.
- Leading role in setting-up of Embedded Systems lab and Data Mining Lab across MJCET campus.
- IEEE Transaction (Systems, Men, & Security) Journal & Conference Reviewer.
- Paper Setter for various written examinations of B.E/B.Tech/MCA/M.Tech., of OU, JNTU, and others.
- Supervised several projects for **B.E (21)**, **M.C.A (14)**, and **M.Tech (12)**.
- External examiner for evaluation of **M.Tech dissertations/projects**.

PROFESSIONAL MEMBERSHIP

IEEE Computer Society , Member
Computer Society of India, Member
IEI (India) , Member

CONFERENCE, WORKSHOPS AND MEETINGS

- Organized one Week FDP on “DATA SCIENCE TECHNOLOGIES AND NEXT GENERATION ARTIFICIAL INTELLIGENCE (DSAI)-2019” at Muffakham Jah College of Engg & Technology, 3 - 8th Jan. – 2019.
- Attended UGC Sponsored Orientation Programme Institutional Governance & Leadership Skills to Academic Administrators, OU, March 12-13, 2009.
- **Workshops & FDPs : 22 (Total)**

COMPUTER SKILLS

- Operating Systems: UNIX/Linux, Windows
- Languages: C & R-tool .
- Databases: Oracle 8i.
- Data Mining tools: WEKA, Orange.
- Others: LATEX & Overleaf

SUBJECTS TAUGHT TO UG and PG :

- Data Warehousing, Data Mining, Web Mining, Soft Computing
- Data Science, Machine Learning, Artificial Intelligence
- Software Project Management, Software Engineering
- Database Management Systems, Information Systems
- Information retrieval systems
- Computer Organization and Architecture, Embedded Systems

RESEARCH ACTIVITIES:

INTERESTED AREAS OF RESEARCH

- Data Mining, Soft Computing Techniques (Classifier J48, ARM techniques, Decision Trees)
- Banking and Finance (Bankruptcy prediction, Forecasting, Churn prediction, Fraud detection, Credit Scoring), Deceptive Phishing Detection
- Cyber Crime detection from Social Networking Sites
- Monitoring and Surveillance of Social Network Analysis (ATM and Theft at Shopping Malls)
- Suspicious Activity detection from Text and Video

LIST OF PUBLICATIONS

JOURNAL ARTICLES

1. Mohammed Mahmood Ali, "Automated Details Retrieval System for victims of Incidents and Accidents using Fingerprint," *International Journal Of Computing and Digital System*, **Elsevier**, Volume 12, Issue 1, 2021. (Scopus)
2. Juveria fatima Mohammed Mahmood Ali, "Multilingual Suspicious Text Detection In Social Media," **International Journal of Core Engineering and Management (iJCEM)**, Vol. 6, Issue 10, pp. 2348-2353, 2020.
3. Mohammed Mahmood Ali, Mohammad S. Qaseem and Ateeq ur Rahman, "Rumour Detection Models & Tools for Social Networking Sites," **International Journal of Engineering and Advanced Technology (IJEAT)**, Vol. 9, Issue 2, pp. 3291-3296, 2019. (Scopus)
4. Mohammed Mahmood Ali, "Psychological Stress Detection from Social Media Data using a Novel Hybrid Model," **International Journal of Intelligent Systems and Applications in Engineering (IJISAE)**, Vol 6, No 4, 2018. (Scopus)
5. Mohammed Mahmood Ali, "SDF: psychological Stress Detection Framework from Microblogs using Pre-defined rules and Ontologies," **International Journal of Intelligent Systems and Applications in Engineering (IJISAE)**, Vol. 6, Issue 2, pp. 158-164, ISSN:2147-6799, 2018. (Scopus)
6. Mahmood Ali and Lakshmi Rajamani, "Framework for surveillance of Instant Messages", accepted for publication in **International Journal of Internet Technology and Secured Transactions (IJITST)**, **Inderscience publisher, ACM** digital library, March 2013. (Scopus)

7. Mohammed Mahmood Ali, MS Qaseem, Lakshmi Rajamani, and A. Govardhan, "Extracting useful rules through improved decision tree induction using information entropy," published in **International Journal of Information Sciences and Techniques, (IJIST)** Vol.3, No.1, pages 27-41, January 2013.
8. Mohammed Mahmood Ali and Lakshmi Rajamani, "APD: ARM Phishing Detector A System for Detecting Phishing in Instant Messengers," published in **International Journal of Information processing**. Published by IK publishers (INDIA) accessed by IIT professors. In volume 5 issue 2, pg. 12-21. August, 2011.

CONFERENCE PUBLICATIONS

9. Mohammed Mahmood Ali and Lakshmi Rajamani, "Decision tree construction using AVL-Tree," International conference (WORLDCOMP'09) at U.S.A, **Proceedings of IKE 2009**, Volume II, 459-465, 2009.
link: <http://www.cs.uga.edu/~hra/2009-proceedings/final-edition/ike/proceedings.pdf>
10. Mohammed Mahmood Ali and Lakshmi Rajamani, "ARM: improved TFP-Tree using Double Linked list," International conference at **WORLDCOMP'09** at U.S.A, appeared in **Proceedings of IKE 2009**, Volume II, 466-472. 2009.
link: <http://www.cs.uga.edu/~hra/2009-proceedings/final-edition/ike/proceedings.pdf>
11. Mohammed Mahmood Ali and Lakshmi Rajamani, "APD: ARM Deceptive Phishing Detector System Phishing Detection in Instant Messengers Using Data Mining Approach," **4th International Conference (ObCom-2011), Proceedings, Part I, Springer (CCIS) in Communications in Computer and Information Science**, (9th -11th December), 2011.
link: http://link.springer.com/chapter/10.1007%2F978-3-642-29219-4_56?li=true#page-2
12. Mohammed Mahmood Ali and Lakshmi Rajamani, "Automation of decision making process for selection of talented manpower considering risk factor: A data mining approach," **International conference on Information Retrieval & Knowledge Management (CAMP-2012)**, Malaysia, indexed in **IEEE Xplore**.
link: [IEEE Xplore - Automation of selection \(Best paper listed in 2012\)](#)
13. Mohammed Mahmood Ali and Lakshmi Rajamani, "Deceptive Phishing Detection system in Instant messengers from Audio and Text messages: A Data Mining Approach", published in **PRIME-2012 (21st-23rd March) international conference**, indexed in **IEEE Xplore**.
link: [IEEE Xplore - Deceptive phishing detection](#)
14. Mohammed Mahmood Ali and Lakshmi Rajamani, "Decision Tree Induction: Priority Classification", published in **ICAESM-2012 (30th-31st March) International conference**, indexed in **IEEE Xplore**.
link: [IEEE Xplore - Decision tree induction: Priority classification](#)
15. A. Govardhan Mohammed S. Qaseem, M.Khader Baig, and Mahmood Ali, "Profile based phishing detection in chat rooms using ARM," **AICTE Sponsored National Conference on Advances in information, Communication and Networking Technologies, (NCICNT-2012)**, Pages 6-11, August 2012.

16. Mohammed Mahmood Ali, MS Qaseem, A. Govardhan, and Lakshmi Rajamani "Improved decision tree induction: Prioritized Height Balanced tree with entropy to find hidden rules", published in **CCSEIT-2012**(26th-28th October), **International conference**, indexed in **ACMDigital Library**.
link: <http://dl.acm.org/citation.cfm?id=2393346>
17. Mohammed Mahmood Ali, Mohammed Abdul Rasheed, and Khaja Moizuddin Mohammed, "Mapping of Biological Sciences with Quran and Ahadith: An Ontology Approach," International Conference on Advances in Information Technology for the Holy Quran and Its Sciences, IEEE, 2013.
link: <https://www.computer.org/csdl/pds/api/csdl/proceedings/download-article/12OmNwvDQrz/pdf>
18. Mohammed Mahmood Ali, and Lakshmi Rajamani, "Framework for Surveillance of Emails to Detect Multilingual Spam and Suspicious Messages," **IEEE Workshop on Computational Intelligence: Theories, Applications and Future Directions , IIT Kanpur**, India, pp. 42-56, July 2013.
link <http://www.iitk.ac.in/ee/courses/archives/2013/ci/Workshop-Proceedings/talks.html>.
19. Mohammed Mahmood Ali, Khaja Moizuddin, and Lakshmi Rajamani, "Framework for Surveillance of Instant Messages in Instant messengers and Social networking sites using Data Mining and Ontology," **IEEE Techsym2014, IIT Kharagpur**, Feb 28th- Mar 2nd 2014.
link: <http://ieeexplore.ieee.org/abstract/document/6808064/>
20. M. V. Dass, M.A. Rasheed, Mohammed Mahmood Ali, "Classification of lung cancer subtypes by data mining technique," Control, Instrumentation, Energy and Communication (CIEC), IEEE, 2014.
link: <http://ieeexplore.ieee.org/abstract/document/6959151/>
21. M. Venkat Dass Mohammed Mahmood Ali Mohammed Rahmath Ali, "Image Retrieval Using Interactive Genetic Algorithm," International Conference on Computational Science and Computational Intelligence , ACM/IEEE, 2014.
link: <http://dl.acm.org/citation.cfm?id=2623830>
22. Mohammed Mahmood Ali, and Dr. Lakshmi Rajamani, "An approach for deceptive phishing detection and prevention in social networking sites using data mining and Wordnet ontology," International Conference on Electrical, Electronics, Signals, Communication and Optimization (EESCO-2015), Visakhapatnam, Andhra Pradesh, India, IEEE, pp. 1-5, January, 2015.
link: <http://ieeexplore.ieee.org/document/7253731/?section=abstract>
23. Mohammed Mahmood Ali, Ateeq ur Rahman, and Shaikha Hajera "A Comparative Study of Various Image Dehazing Techniques," International Conference on Energy, Communication, Data Analytics and Soft Computing (ICECDS), IEEE, August 2017.
24. Mohd Mahmood Ali, and et. al., "ESMD: Enhanced Suspicious Message Detection Framework in Instant Messaging Applications," 2020 Fourth International Conference on Inventive Systems and Control (ICISC), IEEE, pp. 777-784, 2020.
25. Mohammed Mahmood Ali, Mohd S Qaseem, Md Ateeq Ur Rahman, "A Survey on Deceptive Phishing Attacks in Social Networking Environments," Proceedings of the Third International Conference on Computational Intelligence and Informatics, Springer, Springer, pp. 443-452, 2020.

26. Mohammed Mahmood Ali, and M.S Qaseem, Strategies and Tools for Effective Suspicious Event Detection from Video: A Survey Perspective (COVID-19), Contactless Healthcare Facilitation and Commodity Delivery Management During Covid-19, Springer, 2021.
27. Ali, M.M., Qaseem, M.S., Khan, M.H.S. Survey of Surveillance of Suspicious Behavior from CCTV Video Recording. In: Maurya, S., Peddoju, S.K., Ahmad, B., Chihi, I. (eds) Cyber Technologies and Emerging Sciences. Lecture Notes in Networks and Systems, vol 467. Springer, Singapore, 2022.
28. Ali, M.M., Noorain, S., Qaseem, M.S., ur Rahman, A. (2023). Suspicious Human Behaviour Detection Focusing on Campus Sites. In: Chaurasia, M.A., Juang, CF. (eds) Emerging IT/ICT and AI Technologies Affecting Society. Lecture Notes in Networks and Systems, vol 478. Springer, Singapore, 2022.
29. Ali, M.M., Qaseem, M.S., Ahmad, S.S. (2023). Rumour Detection Model for Political Tweets Using ANN. In: Kumar, A., Ghinea, G., Merugu, S. (eds) Proceedings of the 2nd International Conference on Cognitive and Intelligent Computing. ICCIC 2022. Cognitive Science and Technology. Springer, Singapore.

WORKSHOP & SEMINARS ACTIVITIES:

Sl.No.	Name of workshop	DATE	PERIOD	PLACE
1	National Workshop on “ Data Mining ”	15 th May, to 16 th May 2008	2 days	UCE, OU, Hyderabad
2	Advanced Technology Programme (Research-oriented) on “ Data Mining: Next generation challenges ”	23 rd June to 5 th July, 2008	2 Weeks	NIT, Warangal
3	National Workshop on “ RIA & Middleware technologies ”	21 st July to 26 th July, 2008	1 Week	UCE, OU, Hyderabad
4	International Workshop on “ Business Data Mining ”	22 nd Dec to 27 th Dec, 2008	1 Week	CR RAO AIMSCS UOH Campus, Hyderabad
5	National workshop “ Middle ware technologies ”	19 th March To 21 st March, 2009	3 days	UCE, OU, Hyderabad

6	National workshop “ Soft Computing ”	30 th March To 31 st March, 2009	2 days	UCE, OU, Hyderabad
7	Attended “ Insight 2009 ” programme	3 rd April To 4 th April, 2009	2 days	Infosys, Gacchi Bowli, Hyderabad
<u>8</u>	<u>Delivered lecture on “Ms-Access 2007”</u>	<u>6th Jan., 2009</u>	<u>1 day</u>	<u>UGC, Academic Staff College, Hyderabad</u>
9	Attended “ Internet security conclave ”	Feb 7 th , 2009	1 day	Delloitte, Hyderabad
10	Attended Colloquium on Computational Intelligence (Rough Set based approach)	23 rd -24 th march 2010	2 days	DST, UOH Campus, Hyderabad
11	Attended International Conference in data mining “PAKDD 2010”	21 st -24 th June 2010	4 days	IIIT, Gachibowli, Hyderabad
12	Attended National workshop on “ Research trends in computer science ”	4 th -5 th March, 2011	2 days	Muffakham Jah College of Engg., & Tehnology
13	Attended ISTE workshop on “ Software Development Techniques for Teachers of Engg., & Science Institutes ”	5 th Nov. – 4 th Dec. 2011	2 weeks	Conducted by IIT- (Bombay) at MJCET
14	Attended ISTE workshop on “ Effective Conference paper Writing ”	18 th -19 th Feb 2012	2 days	Conducted by IIT- (Bombay) at MJCET
15	Attended ISTE workshop on “ AAKASH for education ”	10 th -11 th Nov 2012	2 days	Conducted by IIT- (Bombay) at MJCET
16	Attended ISTE workshop on “ DATABASE MANagementsystems ”	21 st – 31 st May 2013	2 weeks	Conducted by IIT- (Bombay) at MJCET
17	Workshop on “ Game Theory with	6 th October	1 day	Conducted at MJCET

	Applications to Security”			
18	Workshop on “ Big Data Analytics & Deep Learning ”	3 rd -8 th Jan 2018	1 Week	Conducted by CSI-MJCET
19	Workshop Conducted on “ Data Science Technologies & Next Generation Artificial Intelligence ”	3 rd -8 th Jan 2019	1 Week	Conducted by CSI-MJCET
20	STTP on “On Optimization Techniques In Machine Learning For Wireless & IOT Applications”	24 th to 29 th Aug. 2020	1 Week	Conducted by AICTE@MREC
21	FDP on “Machine Learning and Data Science for Engineering Applications”	5 th to 10 th June 2020	1 Week	Conducted by SCET
22	FDP on “Machine Learning”	9 th to 13 th June 2020	5 days	Conducted by Krishna Chaitanya Institute of Technology & Sciences

AWARDS & RECOGNITIONS:

Sl.No.	Name of work	Year	Remarks
1	IEEE Transaction Reviewer	2013 to Till Date	IEEE Transactions on Systems, Man and Cybernetics: Systems, SMCA;
2	Springer Journal Reviewer	2013 to Till Date	Journal of The Institution of Engineers (India) - Series B
3	IEEE Conference Session Chair	2018	Vellore, Tamilnadu
4	IEEE – Program Committee (reviewer)	2014 & 2018	ICCCT–2014 & ICITE - 2018 Osmani University, Hyderabad
5	Journal Editorial Board Member	2017	Journal of Data Mining and Management (Mat Journals)
6	JIII – Reviewer	2017	JIII: Journal of Industrial and Intelligent Information
7	IJECE –Reviewer	2018	International Journal of Electrical and Computer Engineering

ADDITIONAL ACTIVITIES:

Sl.No.	Name of work	Year	Organization
1	Authored the Course Material for Information Technology Workshop (followed in 8 Engg. Colleges)	2007	JNTU(H) – Shadan College of Engineering & Technology
2	Designed the Course Material for <u>Data Mining Lab</u> (followed in Deccan and Islamia Engineering College)	2010	OU – Muffakham Jah college of Engineering & Technology
3	Participated in Confidential Work of External Examination regularly	2009 to 2017	OU
4	Question paper setting B.E Courses	2009 to 2017	OU
5	Internal Exam In-charge	2009 to 2014	Muffakham Jah College of Engineering & Technology
6	External-Examiner for M.Tech Project-Viva	2013	OU-CBIT
7	Chief Examiner for B.E	2014	Object Oriented & System Development

PROJECTS:**1. Automated Details Retrieval System for victims of Inci-dents and Accidents using Fingerprint**

Automated Details Retrieval System (ADRS) using victims Fingerprint from which Aadhaar details and mobile numbers are extracted. Simultaneously, ADRS also searches for retrieving some additional details from repositories of Driving license, Voter-id card, Pan Card, Social Networking Sites (SNS) and Mobile Service providers. Input to ADRS is Thumb/Finger impression of victims who are partially injured or missing children's or aged persons or mentally disabled persons. Internally, ADRS detects and chooses unique Aadhaar number from the victims fingerprint. Later, ADRS starts mapping, crawling, retrieving and then gathering information through others databases (Pan, voter-id, Passport and Driving license, SNS) which makes the ADRS more precise and efficacious. This ADRS retrieves the information details by crawling through the online databases and generates the report. The generated report constitutes of Name, address, mobile, father's name, DOB and mobile number of victim along with details of six (6) nearest family members are fetched using Reinforcement machine learning technique. With this facility, unknown details can be traced and intimated to their family members regarding the condition of deceased persons or missing adults or children's. The precision rate obtained from the proposed ADRS is 96.39%. when compared to other state-of-art systems (Finger, Iris, Odor, FLDNet, Multimodal).

2. Survey of Surveillance of Suspicious Behavior from CCTV Video Recording

Many of crimes that are executed through online-mode are un-identified. Currently, most of crimes are explicitly executed in front of surveillance cameras which are implicitly recorded through CCTV cameras. The

surveillance systems recording failed to catch those culprits from recorded videos spontaneously. No doubt, the strategies were developed where the culprit's photos are captured and criminal department start hunting for those culprits for days, months or years. Unfortunately, in most of cases, searching for culprits is prolonged for short span of time and later the hunting task may be stopped or closed, due to many reasons such as delay in searching process or permission restrictions or insufficient proofs or change of detective officers. Innumerable works exists in the market that monitors the suspicious behavior analysis of persons, but fails to catch them on the spot at the offence location. To resolve this critical issue, we need to make use of these recorded stored videos for catching the culprits on the spot at run-time by implementing an alerting strategy via an automated alarming system at run-time during the crime scenario itself. This survey emphasizes on various video surveillance systems that were developed earlier for catching the culprits. Many of the state-of-art systems lack the ability to surveillance such suspicious videos at run-time. Many of the existing surveillance systems fail to generate an alert or alarms during the execution of crime which are video recorded implicitly.

3. Enhanced Suspicious Message Detection Framework in Instant Messaging Applications

The excessive use of Instant Messaging Applications (IMA) and Social Networking Sites (SNS) has tremendously increased the suspicious information sharing activity which in turn is effectively used for evil purposes too. Many of terrorist and extremist organizations use these as a means of latent untraced communication for criminal activities. Surveillance of instant messages which usually include abbreviated or short-form words with malicious intent are difficult to detect. These words cannot be detected by an earlier OSMD surveillance tool, resulting in the concealment of suspicious messages. For detecting suspicious messages, the SFC program is proposed for OSMD which is renamed as Enhanced Suspicious Message Detection (ESMD) Framework that converts short form into full-form words and then categorizes the type of crime. Further, ontology-based information extraction technique (OBIE) and logical predefined rules are used for the detection of suspicious words from domain experts blended with the information taken from historical knowledge of suspicious dataset i.e., GTD (Global Terrorism Database).

The above given details pertaining to my achievements are true to my knowledge and it has no discrepancies in it.

Date: 17/08/2023

Dr. Mohammed Mahmood Ali