Curriculum Vitae

Muhammad Abulaish, PhD (IIT Delhi)

Professor | Senior Member: IEEE, ACM, and CSI

Department of Computer Science

South Asian University, New Delhi, India

E-mail: abulaish@sau.ac.in, abulaish@ieee.org, Mobile: +91-7503607446

Summary

Academic Qualification

- 1 **Doctor of Philosophy (PhD): Feb. 2007** Indian Institute of Technology (IIT) Delhi, India
- 2 **Master of Computer Applications (MCA):** 1998 MNNIT (earlier known as MNREC), Allahabad, India
- 3 **B.Sc. (Hon.) Mathematics:** 1994 B. R. Ambedkar Bihar University, Muzaffarpur, India

Teaching/Industry Experience

- 1 University (UG & PG level): 23 years
- 2 **Software Industry: 2** years 3 months

Publication Summary

Total Res. papers: 139 (all referred & indexed)

Journal papers: 46 (IEEE/ACM Transactions: **07**)

Book chapters: 10 (Springer: 06, Wiley & Sons: 01, Taylor & Francis: 01, Wiley/IEEE: 01, IGI Global: 01)

Int'l conf. proceedings: 83 (LNCS/LNAI: 20,

ACM: 18, IEEE-CPS: 35, Others: 10)

10 **Senior Member:** IEEE, ACM, and CSI

Honors & Awards

National: 02

International: 07

Research & Supervision

- 1 **Research Areas:** Data Analytics & Mining, Machine Learning, Social Network Analysis, Biomedical Informatics
- 2 Research Experience (post-PhD): 17 years
- 3 **Research Publications (all referred): 139**

Journals: 46, Book chapters: 10, Conference proceedings: 83

- 5 M.Phil/PhD Supervision: Awarded 10 (PhD: 09, M.Phil: 01), Working 06 (all PhD)
- 6 **Research Projects:** Completed (02)

Professional/Co-curricular Activities 1 Associate Editor of Journals: 02 6 Conf/Workshop/Symposia organization: 08 2 Journal Review board member: 10 7 Curriculum development/Revision: 05 3 Program/Session chair: 16 8 Invited/Expert talks delivered: 32 4 International academic visits: 17 countries 9 Conference/Workshop attended: 32+

Administration

5 **IPC member: 23**+

- 1 **Acting Registrar,** South Asian University, India, since May 2022
- 2 **Director (Admissions & Examinations),** South Asian University, India, Dec 2021 to Sep 2022
- 3 Chairperson, Dept. of Computer Science, South Asian University, India, Dec 2021 to Dec 2023
- 4 Chairperson, Dept. of Computer Science, South Asian University, India, Sep 2016 to Sep 2018
- 5 | **Head, Department of Computer Science**, Jamia Millia Islamia, India, Jan'13 to Jan'16
- 6 University Coordinator, MHRD-GIAN Scheme, Jamia Millia Islamia, India, July'15 to Dec'16
- 7 | Head, ISurF Research Group, Centre of Excellence in Information Assurance, KSA, Oct'10 to Dec'12
- 8 **Centre Superintendent, Entrance Tests**, Jamia Millia Islamia, India, 2013-2015
- 9 **Head, Computer Centre**, Jamia Hamdard, India, Oct'03 to Jan'04

Detailed Information

Teaching Experience (23+ years)

A. Foreign/International Universities

Professor (Aug. 2022 – till date)

Department of Computer Science, South Asian University, Delhi, India

Sr. Associate Professor (Feb. 2019 – July 2022)

Department of Computer Science, South Asian University, Delhi, India

Associate Professor (Feb. 2016 – Jan. 2019)

Department of Computer Science, South Asian University, Delhi, India

Associate Professor (Oct. 2010 – Dec. 2012)

Centre of Excellence in Information Assurance, King Saud University, Riyadh, Saudi Arabia

Assistant Professor (Aug. 2007 - Feb. 2009)

College of Computer Science, King Khaled University, Abha, Saudi Arabia

B. Domestic Universities

Professor (Feb. 2015 – Nov. 2021)

Department of Computer Science, Jamia Millia Islamia (A Central University), Delhi, India

Reader/ Associate Professor (Feb. 2009 – Feb. 2015)

Department of Computer Science, Jamia Millia Islamia, New Delhi – 25, India

Senior Lecturer in Computer Science (Sep. 2006 – Feb. 2009)

Department of Mathematics, Jamia Millia Islamia, New Delhi – 25, India

Lecturer in Computer Science (Jan. 2004 – Sep. 2006)

Department of Mathematics, Jamia Millia Islamia, New Delhi – 25, India

Lecturer (Sep. 2000 – Jan. 2004)

Department of Computer Science, Jamia Hamdard (Hamdard Univ), New Delhi – 62, India

Adjunct Professor (Feb. 2016 – Jan. 2017)

Department of Information Technology, BGBS University, Rajouri, J&K, India

Scholarly Publications

Research Papers: 139 (Journal papers: 46, Book chapters: 10, Conf. papers: 83)

Detailed list of publications is appearing at the end.

Books: 02 (under-development)

Title-1: Exploring Database Systems: A systematic approach to develop database design, implementation and querying skills (*under-development*)

Title-2: Programming in Python - From Core Programing to Data Analytics and Machine Learning (under-development)

Research Projects (Completed)

Title: A Web Surveillance Framework for Criminal Networks Identification and Monitoring

Funding agency: King Abdulaziz City for Science & Technology (KACST)

Approved budget: 1.23 Million Saudi Riyal (~ US \$328,000)

Title: An Online Social Media Analytics Framework for Characterization and Analysis of Youth

Radicalization in SAARC Nations

Funding Institute: South Asian University, New Delhi, India

Amount: US \$45,000)

Supervision & Guidance

A. PhD Supervision:

1. Jahiruddin (Professor, D/o Computer Science, Jamia Millia Islamia, New Delhi)

Thesis Title: Text Mining for Knowledge Discovery from Domain-Specific Texts

Status: Awarded/ 2012

2. Tanvir Ahmad (Professor & Ex-Head, D/o Computer Engineering, Jamia Millia Islamia, N. Delhi)

Thesis Title: Frequent and Sequential Patterns Mining and their Applications

Status: Awarded / 2013

3. Ahmad Kamal (Assistant Professor, D/o Mathematics, Jamia Millia Islamia, N. Delhi)

Thesis Title: Mining Web Opinion Sources using Machine Learning Techniques

Status: Awarded/2014

4. Sajid Yousuf Bhat (Assistant Professor, D/o Computer Science, University of Kashmir, J&K)

Thesis Title: Structural Data Mining Framework for Social Network Analysis

Status: Awarded/ 2014

5. Mohd. Fazil (Researcher at the Center for Transformative Learning, Univ. of Limerick, Ireland)

Thesis Title: Characterization and Detection of Socialbots in Online Social Networks

Status: Awarded/2019

6. Aslam Parwez (Assistant Professor, D/o Computer Science, Jamia Hamdard, New Delhi)

Thesis Title: An Integrated Data Analytics Framework for Climate Specific Disease Surveillance

Status: Awarded/2019

7. Vineet Kumar Sejwal (PGT at a Govt. Senior Secondary School, Delhi)

Thesis Title: Towards the Design of a Context- and Trust-Aware Recommender System

Status: Awarded/2021

8. Chetna Kumari (Research Associate at All India Institute of Ayurveda, Delhi, India)

Thesis Title: Designing Inhibitor Targeting Autophagy Regulating Kinases for Cancer Using Machine

Learning Techniques Status: Awarded/ 2021

9. Ashraf Kamal (Data Scientist at ACL Digital, Bengaluru, India)

Thesis Title: Twitter Data Mining for Figurative Language Identification and Sentiment Classification

Status: Awarded/2021

10. Javati Gulati

Thesis Title (tentative): Scalable Methods for Finding Communities in Complex Networks

Status: Awarded/ 2023

11. Harshita Dalal

Thesis Title (tentative): Detecting Online Identity Deceptions using Deep Learning Techniques

Status: Working since July 2016

12. Nesar Ahmad Wasi

Thesis Title (tentative): A Study of Lifelong Machine Learning Framework

Status: Working since July 2017

13. Asimul Haque

Thesis Title (tentative): Rumor Detection in Online Social Media

Status: Working since July 2017

14. Amit Shah

Thesis Title (tentative): Deep Learning Techniques for Classificatory Analysis of Imbalanced Textual Data

Status: Working since July 2018

15. Anjali Bharadwaj

Thesis Title (tentative): Integrating Neural Network-Based Language Models with Multi-label Classifiers

for Textual Emotion Detection Status: Working since July 2019

B. M.Phil Supervision:

Md. Tofael Ahmad

Thesis Title: Cyberbullying Detection in Twitter Using Machine Learning Techniques

Status: Awarded/ 2018

C. Masters' Dissertations: 30+

Professional Activities

B. Editorial Board Member of Journals

Associate Editor: Social Network Analysis and Mining, Springer (since December 2020)
Associate Editor: JKU-Computer and Information Sciences, Elsevier (2018-2020)

A. Reviewer of Journals

IEEE Transactions on Knowledge and Data Engineering, IEEE, USA

IEEE Transactions on Computational Biology & Bioinformatics, IEEE, USA

IEEE Transactions on Information Forensics & Security, IEEE, USA

IEEE Transactions on Cybernetics, IEEE, USA

Social Network Analysis and Mining, Springer, USA

Knowledge and Information Systems, Springer, USA

Information Sciences, Elsevier, Netherlands

Digital Investigation, Elsevier, Netherlands

Journal of Biomedical Informatics, Elsevier, Netherlands

Web Intelligence & Agent Systems, IOS Press, Netherlands

C. Conference/Workshop/Symposia Organization

Organized an Int'l Symposia on "Emerging Trends in Deep Learning and Data Analytics (ET-DLDA)" at South Asian University during 20-21, 2022. Speakers: Prof. M. J. Zaki from RPI, NY, USA and Dr. Lipika Dey, Principal Scientist at Innovations Lab, TCS.

Organized an Int'l Symposia on "Learning from Text" at South Asian University on 31st December 2018. Speaker: Prof. M. J. Zaki, Department of Computer Science, RPI, NY, USA.

Organized a Summer Training on "Regression and Deep Learning" at South Asian University during June 11-12, 2018. Speaker: Prof. M. J. Zaki, Dept. of Computer Science, RPI, NY, USA.

Organized an International Workshop on "Data Analytics and Machine Intelligence (DAMI)" at the Tribhuvan University, Kathmandu, Nepal, Dec. 9-11, 2017.

Worked as a Convenor for the International Workshop on "Hybrid Soft Computing and Data Analytics", organized at South Asian University during January 10-11, 2017.

Organized an MHRD-GIAN Course on "Graph Mining and Analytics" at Jamia Millia Islamia, New Delhi funded by MHRD, Govt. of India, December 17-23, 2015.

Organized a DBT-BIF Workshop on Advances in Computational Biology and Bioinformatics (ACBB) at the Dept. of Computer Science, Jamia Millia Islamia, New Delhi, Feb. 27-28, 2015.

Organized a special session on "Advances in Web Intelligence and Data Mining" at the 5th Indian International Conference on Artificial Intelligence (IICAI), Bhubaneswar, India, Dec. 14-16, 2011.

D. Program/Session Chair (Selected 7 out of 17)

Chaired a Technical Session at the 20th IEEE/WIC/ACM International Conference on Web Intelligence and Intelligent Agent Technology (WI-IAT'21), Melbourne, Australia, Dec. 14-17, 2021.

Worded as Workshop Chair for the IEEE/ACM Int'l. Conference on Advances in Social Networks Analysis and Mining, The Hague, Netherlands, Dec. 7-10, 2020.

Worked as Publicity Chair for the 19th IEEE/WIC/ACM International Joint Conference on Web Intelligence and Intelligent Agent Technology (WI-IAT'20), Melbourne, Australia, Dec. 14-17, 2020.

Worked as Publicity Chair for the 18th IEEE/WIC/ACM International Conference on Web Intelligence (WI'19), Thessaloniki, Greece, Oct. 14-17, 2019.

Chaired a Technical Session at the 20th International Conference on Information Integration and Web-based Applications & Services (iiWAS), Yogyakarta, Indonesia, Nov. 19-21, 2018.

Chaired a Technical Session at the IEEE/WIC/ACM Web Intelligence Congress, Warsaw, Poland, Aug. 11-14, 2014.

Chaired a Technical Session at the IEEE/WIC/ACM International Conference on Web Intelligence, Macau, Dec. 4-7, 2012.

E. Program Committee Member (Selected 5 out of 23)

IJCAI-PRICAI: 29th International Joint Conference on Artificial Intelligence & the 17th Pacific Rim International Conference on Artificial Intelligence [2022, 2021]

SDM: SIAM International Conference on Data Mining [2022, 2021, 2020, 2019]

CIKM: ACM International Conference on Information and Knowledge Management [2022, 2021, 2020, 2018, 2013, 2012]

WI: IEEE/WIC/ACM Int'l Conf. on Web Intelligence [2012-2022, 2007-2008]

KDIR: Int'l Conf. on Knowledge Discovery and Info. Retrieval [2009, 2012 – 2020]

Professional Memberships

Senior Member, Institute of Electrical and Electronics Engineers (IEEE), USA

Senior Member, Association for Computing Machinery (ACM), USA

Senior Member, Computer Society of India (CSI), India

Member, IEEE Computer Society (IEEE-CS), USA

Member, ACM Special Interest Group on Knowledge Discovery and Data Mining (SIG-KDD), USA

Life Member, Indian Society for Technical Education (ISTE), India

Life Member, Indian Science Congress Association (ISCA), India

Life Member, Institution of Electronics and Telecommunication Engineers (IETE), India

Honors & Awards

Received best paper award for the paper entitled "A Multi-Attributed Graph-Based Approach for Text Data Modeling and Event Detection in Twitter" at the Social Networking Workshop, organized in association with the 11th International Conference on Communication Systems and Networks (COMSNETS), Bangalore, India, Jan. 7-11, 2019.

Received best paper award for the paper entitled "Why a Socialbot is Effective in Twitter? A Statistical Insight" at the Social Networking Workshop, organized in association with the 11th International Conference on Communication Systems and Networks (COMSNETS), Bangalore, India, Jan. 4-8, 2017.

Received Silver Medal from Malaysian Association of Research Scientists for our inventions at Malaysia Technology Expo, February 17-19, 2011

Received two Bronze medals from Malaysian Association of Research Scientists for our inventions at Malaysia Technology Expo, February 16-18, 2012

Received a Bronze medal at the 40th International Exhibition of Inventions of Geneva for one of our inventions, April 18-22, 2012

Appointed to the ACM Transactions on the Web Distinguished Review Board for the year 2022-2024

Named in the world's top 2% of Scientists List in the field of ICTs compiled by Stanford Univ. in 2022

Senior member of IEEE since March 2012 **Senior member** of ACM since April 2012 **Senior member** of CSI since 2010

Invited Talks (Selected 10 out of 32)

Delivered an Invited Talk on "Socialbots Detection in Online Social Networks using Machine Learning Techniques" at the Faculty Development Program on Enabling Technologies for Artificial Intelligence, Machine Learning and IOT, organized by Department of Computer Engineering, AMU Aligarh under the AICTE Training And Learning (ATAL) scheme during June 21-25, 2021.

Delivered an Invited Talk on "Social Computing: Challenges and Research Directions" at the IEEE-CIS Summer School on "Emerging Research Trends in Computational Intelligence — Theory and Applications" organized by IIT Indore, Nov. 26-29, 2020.

Delivered an Invited Talk on "Social Network Analytics: Characteristics, Challenges, and Research Directions" at the 18th Refresher Course in Computer Science and Information Technology, organized by UGC-HRD Centre, JNU, New Delhi, Sep. 16-27, 2019.

Delivered a Keynote Address on "Data Analytics and Smart Computing" at the 9th National Students' Conference on Information Technology & 4th International Conference on ICT with Smart Computing, Kathmandu, Nepal, Dec. 29, 2018.

Delivered an Invited Talk on "Research Challenges in Network Science" at the Faculty Development Programme on "Network Science: Foundation of Social Network Analysis", jointly organized by Ramanujan College and Department of Computer Science, University of Delhi, Dec. 3-8, 2018.

Delivered an Invited Talk on "Amalgamation of Textual and Structural Data for Deeper Insight – A Graph-Theoretic Approach for Social Media Data Analytics" at the International Symposium on Computational Mathematics, Optimization, and Computational Intelligence organized by IIT Indore under NTU-INDIA connect program, July 17-19, 2017.

Delivered an Invited Talk on "Fusing Content and Structural Information for a Deeper Insight" at the Department of Computer Science, University of Delhi, New Delhi, March 17, 2017.

Delivered an Expert Talk on "Social Network Analysis and Mining – A Big Data Application" at the Int'l Conference on Exploring Trends and Practices in Information Technology and Management (ICETPITM) organized by the Departments of CS and Management, St. Aloysius' College, Jabalpur, Madhya Pradesh, India, Jan. 5-6, 2015.

Delivered an Invited Talk on "Towards a Knowledge-Based Web Surveillance Framework" at the Rensselaer Polytechnic Institute (RPI), Troy, New York, USA, April 15, 2011.

Delivered an Expert Talk on "SNAnalyst: A Data Mining Framework for Social Network Analysis" at the International Workshop on Advances in Information Assurance Research, King Saud University, Saudi Arabia, May 15-16, 2011.

Curriculum Development

Ex-Officio Chairperson to revise the M.Sc. (Computer Science) and Pre-PhD course work curriculum of the Department of Computer Science, South Asian University, that are in effect from the academic year 2016-2017.

Chairman, Curriculum Revision Committee to revise the syllabi of MCA, PGDCA, and M. Sc. (Bioinformatics) programme for the Department of Computer Science, Jamia Millia Islamia, New Delhi, 2014 & 2015.

Coordinator, Curriculum Revision Committee to revise the course structure and syllabi of MCA, PGDCA, and M. Sc. (Bioinformatics) programme for the Department of Computer Science, Jamia Millia Islamia, New Delhi, 2009.

Coordinator, Curriculum Revision Committee to revise the course structure and syllabi of M. Sc. Tech. (Industrial Mathematics with Computer Applications) programme for the Department of Mathematics, Jamia Millia Islamia, New Delhi, 2005.

Coordinator, Curriculum Revision Committee to revise course structure and syllabi of the MCA Programme for the Department of Computer Science, Jamia Hamdard, New Delhi, 2003.

Coordinator, Curriculum Development Committee to design course structure, bye-laws and syllabi for M.Sc. (Computer Science) and M.Sc. (Information Technology) programme for the Department of Computer Science, Jamia Hamdard, New Delhi, 2002.

Administration

Acting Registrar: South Asian University, N. Delhi, since May 2022

Director (Admissions & Examinations): South Asian University, N. Delhi, Dec. 2021 – Aug. 2022

Chairperson: Department of Computer Sc., South Asian University, N. Delhi, Aug. 2016 to Aug. 2018

Head: Department of Computer Science, Jamia Millia Islamia, New Delhi, Jan. 2013 to Jan. 2016

University Coordinator: Global Initiative of Academic Network (GIAN) Scheme, launched by the Ministry of Human Resource Development (MHRD), Govt. of India, July 2015 to Dec. 2016

Member, Central Admission Committee: Entrance Tests 2017 for admission to various programmes of South Asian University, Delhi, India.

President: Subject Association, Department of Computer Science, Jamia Millia Islamia, New Delhi, Jan. 2013 to Jan. 2016

Superintendent: PG Semester Examinations, Department of Computer Science, Jamia Millia Islamia, New Delhi, 2013 to 2015.

Chairman: Departmental Research Committee, Department of Computer Science, Jamia Millia Islamia, New Delhi, Jan. 2013 to Jan. 2016.

Chairman: Research Ethics Committee, Centre of Excellence in Information Assurance, King Saud University, Riyadh, Saudi Arabia, Feb. 2011 to Dec. 2012.

Center Superintendent: UG/PG Entrance Tests, Jamia Millia Islamia, New Delhi, 2013-2015.

Head: Computer Centre, Jamia Hamdard, New Delhi, Oct. 2003 to Jan. 2004.

Papers Taught

Data Mining [M.Sc. (CS): 2016-2023; MCA: 2003, 2010, 2013-2015] **Database** [M.Sc. (CS): 2016-2022, MCA: 2000, 2001, 2010, 2013-2015]

Network Science [M.Sc. (CS): 2017, 2021]

Data Analytics [PhD: 2014]

Advanced Database [MCA: 2013-2015]

Operating System [M.Sc. (CS): 2016; MCA: 2000-2002; BCA: 2001, 2002]

Data Structures [M.Sc. (CS): 2016; MCA: 2000-2003, 2009; M.Sc. Tech.: 2004-2006]

Analysis & Design of Algorithms [MCA: 2009; M.Sc. Tech: 2004-2006] **Computer Organization and Architecture** [MCA: 2000-2001, 2003]

Research Publications: 139

A. Journal Papers: Selected 30 out of 46 (all referred)

1. Vineet K. Sejwal and Muhammad Abulaish:

- A Hybrid Recommendation Technique using Topic Embedding for Rating Prediction and to Handle Cold-Start Problem, Expert Systems with Applications, Vol. 209, 118307, Elsevier, pp. 1-12, 2022. **[IF: 8. 67]**
- 2. Muhammad Abulaish, Mohd Fazil, and Muhammed J. Zaki:

 Domain-Specific Keyword Extraction Using Joint Modeling of Local and Global Contextual

 Semantics, ACM Transactions on Knowledge Discovery from Data, Vol. 16, No. 4, pp 1-30, 2022.

 [IF: 2. 71]
- 3. Mohd Fazil, Amit Kumar Sah, and Muhammad Abulaish: DeepSBD:

 A Deep Neural Network Model with Attention Mechanism for SocialBot Detection, IEEE
 Transactions on Information Forensics and Security, Vol. 16, pp. 4211-4223, 2021. [IF: 7. 18]
- 4. Ashraf Kamal and Muhammad Abulaish:

 CAT-BiGRU: Convolution and Attention with Bi-directional Gated Recurrent Unit for SelfDeprecating Sarcasm Detection, Cognitive Computation, Topical Collection: A Decade on Sentic
 Computing, Vol. 14, Springer, pp. 91-109, 2021. [IF: 5. 42]
- 5. Muhammad Abulaish, Ashraf Kamal, and Mohammed J. Zaki: A Survey of Figurative Language and its Computational Detection in Online Social Networks, ACM Transactions on the Web, Vol. 14, No. 1, pp. 3:1-3:52, 2020. [IF: 2.04]
- 6. Muhammad Abulaish and Mohd Fazil: *A Machine Learning Approach for Socialbot Targets Detection on Twitter*, **Journal of Intelligent & Fuzzy Systems**, Vol. 40, No. 3, IOS Press, pp. 4115-4133, 2021. **[IF: 1.74]**
- 7. Zubair Ali Ansari, Jahiruddin, and Muhammad Abulaish: *An Efficient Subgraph Isomorphism Solver for Large Graphs*, **IEEE Access**, Vol. 9, pp. 61697-61709, 2021. **[IF: 3.37]**
- 8. Muhammad Abulaish and Mohd Fazil: Socialbots: Impacts, Threat-Dimensions, and Defense Challenges, IEEE Technology and Society Magazine, Vol. 39, No. 3, pp. 52-61, 2020. [IF: 1.55]
- 9. Chetna Kumari, Muhammad Abulaish, and Naidu Subbarao:

 Exploring Molecular Descriptors and Fingerprints to Predict mTOR Kinase Inhibitors using Machine Learning Techniques, IEEE/ACM Transactions on Computational Biology and Bioinformatics, pp. 1-12, 2020. [IF: 3.71]
- 10. Vineet K. Sejwal and Muhammad Abulaish: CAMO: A Context-Aware Movie Ontology Generated from LOD and Movie Databases, Multimedia Tools and Applications, Springer Nature, pp. 1-23, 2020. [IF: 2.76]
- 11. Muhammad Abulaish and Mohd Fazil:

 A Machine Learning Approach for Socialbot Targets Detection on Twitter, Journal of Intelligent & Fuzzy Systems, IOS Press, pp. 1-19, 2020. [IF: 1.74]
- 12. Vineet Kumar Sejwal, Muhammad Abulaish, and Jahiruddin:

 *CRecSys: A Context-Based Recommender System Using Collaborative Filtering and LOD, IEEE

 *Access, Vol. 8, pp. 158432 158448, 2020. [IF: 3.37]
- 13. Mohd. Fazil and Muhammad Abulaish:

 A Socialbots Analysis-Driven Graph-Based Approach for Identifying Coordinated Campaigns in Twitter, Journal of Intelligent & Fuzzy Systems, 38(3), IOS Press, pp. 2961-2977, 2020. [IF: 1.74]
- 14. Muhammad Abulaish, Md. Aslam Parwez, and Jahiruddin:

 DiseaSE: A Biomedical Text Analytics System for Disease Symptom Extraction and Characterization, Journal of Biomedical Informatics, Vol. 100, pp. 103324, 2019. [IF: 6.32]
- 15. Muhammad Abulaish, Ishfaq Majid Bhat, and Sajid Yousuf Bhat:

 Scaling Density-Based Community Detection to Large-Scale Social Networks via MapReduce
 Framework, Journal of Intelligent & Fuzzy Systems, 38(2), IOS Press, 2019, pp. 1663-16742. [IF: 1.74]
- 16. Md. Aslam Parwez, Muhammad Abulaish, and Jahiruddin:

Multi-Label Classification of Microblogging Texts Using Convolution Neural Network, IEEE Access, Vol. 7, pp. 68678-68691, 2019. [IF: 3.37]

17. Muhammad Abulaish, Jahiruddin, and Anjali Bhardwaj:

OMCR: An Opinion-Based Multi-Criteria Ranking Approach, Journal of Intelligent and Fuzzy
Systems, 36(1), pp. 1-15, 2019. [IF: 1.74]

18. Mohd Fazil and Muhammad Abulaish:

A Hybrid Approach for Detecting Automated Spammers in Twitter, IEEE Transactions on Information Forensics and Security, 13(11), pp. 2707-2719, 2018. [IF: 7.18]

19. Muhammad Abulaish and Mohd Fazil:

Modeling Topic Evolution in Twitter: An Embedding-Based Approach, IEEE Access, Vol. 6, pp. 64847-64857, 2018. [IF: 3.37]

20. Tarique Anwar and Muhammad Abulaish:

Ranking Radically Influential Web Forum Users, IEEE Transactions on Information Forensics and Security, Vol. 10, Issue 6, pp. 1289-1298, 2015. [IF: 7.18]

21. Sajid Y. Bhat and Muhammad Abulaish:

OCMiner: A Density-Based Overlapping Community Detection Method for Social Networks, Intelligent Data Analysis, 19(4), IOS Press, pp. 917-947, 2015. [IF: 1.32]

- **22.** Khalid Al-Rowaily, Muhammad Abulaish, Nur Al-Hasan Haldar, and Majed Al-Rubaiana: *BiSAL A bilingual sentiment analysis lexicon to analyze Dark Web forums for cyber security*, **Digital Investigation**, Vol. 14, Elsevier, pp. 53-62, 2015. **[IF: 2.19]**
- 23. Sajid Y. Bhat and Muhammad Abulaish:

HOCTracker: Tracking the Evolution of Hierarchical and Overlapping Communities in Dynamic Social Networks, IEEE Transactions on Knowledge and Data Engineering, 27(4), pp. 1019-1032, 2014. [IF: 9.23]

24. Tarique Anwar and Muhammad Abulaish:

Namesake Alias Mining on the Web and its Role Towards Suspect Tracking, Information Sciences, Vol. 276, pp. 123-145, 2014. [IF: 5.52]

25. Tarique Anwar and Muhammad Abulaish:

A Social Graph Based Text Mining Framework for Chat Log Investigation, Digital Investigation, 11(4), Elsevier, pp. 349-362, 2014. [IF: 2.19]

26. Sajid Y. Bhat and Muhammad Abulaish:

Analysis and Mining of Online Social Networks - Emerging Trends and Challenges, WIREs Data Mining and Knowledge Discovery, 3(6), John Wiley and Sons, pp. 408-444, Nov/Dec 2013. [IF: 10.38]

27. Faraz Ahmed and Muhammad Abulaish:

A Generic Statistical Approach for Spam Detection in Online Social Networks, Computer Communications, 36(10-11), Elsevier, pp. 1120-1129, 2013. [IF: 3.17]

28. Muhammad Yasin and Muhammad Abulaish:

DigLA - A Digsby Log Analysis Tool to Identify Forensic Artifacts, Digital Investigation, 9(3-4), Elsevier, pp. 222-234, 2013. **[IF: 2.19]**

29. Jahiruddin, Muhammad Abulaish and Lipika Dev:

A Concept-Driven Biomedical Knowledge Extraction and Visualization Framework for Conceptualization of Text Corpora, Journal of Biomedical Informatics, 43(6), Elsevier, pp. 1020-1035, 2010. [IF: 6.32]

30. Muhammad Abulaish and Lipika Dey:

Biological Relation Extraction and Query Answering from Medline Abstracts using Ontology-based Text Mining, Data and Knowledge Engineering, 61(2), Elsevier, pp. 228-262, 2007. [IF: 1.99]

B. Book Chapters: 10 (all referred)

1. Ashraf Kamal and Muhammad Abulaish:

Self-Deprecating Humor Detection: A Machine Learning Approach, Nguyen L. M., Phan X. H., Hasida K., Tojo S. (eds) Computational Linguistics. PACLING 2019. Communications in Computer and Information Science, Vol 1215, Springer, ISBN: 978-981-15-6168-9, pp. 483-494, 2020.

- Muhammad Abulaish, Mohd Fazil, and Tarique Anwar: A Contextual Semantic-Based Approach for Domain-Centric Lexicon Expansion, Borovica-Gajic R., Qi J., Wang W. (eds) Databases Theory and Applications. ADC 2020. Lecture Notes in Computer Science (LNCS), Vol 12008, Springer, ISBN: 978-3-030-39469-1, pp. 216-224, 2020.
- 3. Sajid Yousuf Bhat, and Muhammad Abulaish: A Unified Framework for Community Structure Analysis in Dynamic Social Networks, Hema Banati et al. (Eds.) Hybrid Intelligence for Social Networks, Springer, ISBN: 978-3-319-65138-5, pp. 71-90, 2017.
- Ahmad Kamal, Muhammad Abulaish, and Jahiruddin: OntoLSA - An Integrated Text Mining System for Ontology Learning and Sentiment Analysis, Witold Pedrycz and Shyi-Ming Chen (Eds.), Sentiment Analysis and Ontology Engineering, Studies in Computational Intelligence 639, Springer, ISBN: 978-3-319-30317-8, pp. 399-423, 2016.
- Muhammad Abulaish and Sajid Y. Bhat:

 A Density-Based Approach to Detect Community Evolutionary Events in Online Social Networks, F. Can et al. (Eds.), State of the Art Applications of Social Network Analysis, Lecture Notes in Social Networks, Springer, ISBN: 978-3-319-05911-2, pp. 189-208, 2014.
- Tarique Anwar and Muhammad Abulaish: *Modeling a Web Forum Ecosystem into an Enriched Social Graph*, Martin Atzmueller, Alvin Chin, Denis Helic, and Andreas Hotho (Eds.), **Ubiquitous Social Media Analysis**, ISBN: 978-3-642-45391, Springer, pp. 152-152, 2013.
- 7. Muhammad Abulaish and Jahiruddin:

 Web-Content Mining for Learning Generic Relations and their Associations from Textual
 Biological Data, Mourad Elloumi and Albert Y. Zomaya (Eds.), Biological Knowledge
 Discovery Handbook: Preprocessing, Mining and Post-Processing of Biological
 Data, John Wiley & Sons Inc., New Jersey, ISBN: 9781118132739, pp. 919-942, 2013.
- 8. Muhammad Abulaish, Jahiruddin and Lipika Dey:

 Mining Biological Interactions from Biomedical Texts for Efficient Query Answering, Jake Y. Chen and Stefano Lonardi (Eds.), Biological Data Mining (Chapman & Hall/CRC Data Mining and Knowledge Discovery Series), Taylor and Francis Group Publisher, ISBN: 9781420086843, pp. 485-527, 2009.
- 9. Lipika Dey and Muhammad Abulaish:

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