Curriculum Vitae

Dr. Khalid Raza

Designation: Assistant Professor

Office Address: Department of Computer Science

JAMIA MILLIA ISLAMIA (CENTRAL UNIVERSITY)

Jamia Nagar, Okhla, New Delhi-110 025, INDIA

Telephone: +91 11 26981717 Extn. 3452

Email: kraza.jmi [at] gmail.com | kraza [at] jmi.ac.in

Home Page: http://www.kraza.in/

my profile on RESEARCHERID THOMSON REUTERS

Citations: 116 H-Index: 06

CAREER OBJECTIVES

Inclined towards a challenging and growth-oriented career in academics & research where my professional experience, academic background, and a commitment to excel would mutually complement the growth of the organisation and self.

ACADEMIC PROFILES

 Presently working as an Assistant Professor (Senior Scale) at the Department of Computer Science, Jamia Millia Islamia (Central University), New Delhi, India since December 2010.

TECHNICAL PROFILES

• Worked on various technical positions at different organizations including N.C.E.R.T., New Delhi, C.T.P., Jamia Millia Islamia, New Delhi during the period 2003-2010 (~7 years).

PROFESSIONAL & ACADEMIC QUALIFICATIONS

• Ph.D. (Computer Science) from Department of Computer Science, Jamia Millia Islamia, New Delhi (Awarded in December 2014).

Title: "Soft Computing Approach for Modeling Biological Networks"

- MCA (Master of Computer Application) from IGNOU, New Delhi.
- ADCA (Advance Diploma in Computer Application) from IGNOU, New Delhi.
- BCA (Bachelor of Computer Application) from Magadh University, Bodhgaya.
- Intermediate of Science (PCM) from B.I.E.C., Patna.
- Matriculation (X) from B.S.E.B., Patna

UGC NATIONAL ELIGIBILITY TEST (NET) & JUNIOR RESEARCH FELLOW (JRF)

 Qualified National Eligibility Test (NET) and Junior Research Fellow (JRF) in Computer Science & Application conducted by University Grants Commission in December 2009.

RESEARCH INTEREST

- Computational Biology & Bioinformatics (Biological Networks Modeling, Microarray and Next-Generation Sequencing Analysis)
- Soft Computing Techniques

RESEARCH PUBLICATIONS (All Refereed & Indexed)

- [20] Raza, K. Formal concept analysis for knowledge discovery from biological data. *International Journal of Data Mining and Bioinformatics*, Inderscience (Accepted) (IF 0.71)
- [19] Raza, K. & Alam, M. (2016). Recurrent Neural Network Based Hybrid Model for Reconstructing Gene Regulatory Network. Computational Biology and Chemistry, Elsevier, 64:322-334. doi: 10.1016/j.compbiolchem.2016.08.002 (IF 1.16)
- [18] Raza, K. (2016). Reconstruction, topological and gene ontology enrichment analysis of cancerous gene regulatory network modules. *Current Bioinformatics*, 11(2):243-258. doi: 10.2174/1574893611666160115212806 (IF 1.73)
- [17] Raza, K. (2016). Analysis of microarray data using artificial intelligence based techniques. *Handbook of Research on Computational Intelligence Applications in Bioinformatics, IGI Global, USA,* 216-239. doi: 10.4018/978-1-5225-0427-6.ch011
- [16] Raza, K. (2015). M5 Model Tree and Gene Expression Programming for the Prediction of Metrological Parameters. In Proc. of *IEEE 2015 International Conference on Computers, Communications, and Systems (ICCCS)*, Nov 2-3, 2015, Kanyakumari, India, p. 47-51, IEEE. doi: 10.1109/CCOMS.2015.7562850 (IEEE Xplore).
- [15] Raza, K., & Hasan, A.N. (2015). A comprehensive evaluation of machine learning techniques for cancer class prediction based on microarray data. *International Journal of Bioinformatics Research and Applications*, 11(5): 397-416. doi: 10.1504/IJBRA.2015.071940 (Scopus IF 0.54)
- [14] Raza, K. & Kohli, M. (2015). Ant colony optimization for inferring key gene interactions. In Proc. of 9th INDIACom-2015, 2nd International Conference on Computing for Sustainable Global Development, March 11-13, 2015, p. 1242-1246, IEEE. (IEEE Xplore).
- [13] Raza, K. & Jothiprakash, V. (2014). Multi-output ANN model for prediction of seven meteorological parameters in a weather station. *Journal of The Institution of Engineers (India): Series A,* Springer, 95(4), 221-229. doi: 10.1007/s40030-014-0092-9
- [12] Raza, K. (2014). Network biology: A new way to understand complex disease and future of medicine. CSI Communications, 38(10). 22-24.
- [11] Raza, K. (2014). Clustering analysis of cancerous microarray data. Journal of Chemical and Pharmaceutical Research, 6(9), 488-493. (Scopus IF 0.90)
- [10] Ahmad, S., Hamza, A. & Raza, K. (2013). PREs-clustered motifs in Drosophila melanogaster. Res. J. Pharm., Biol. Chem. Sci., 4(4), 1100-1110. (Scopus IF 0.35).
- [9] Raza, K. & Parveen, R. (2013). Reconstruction of gene regulatory network of colon cancer using information theoretic approach. In Proc. of 4th International Conference (CONFLUENCE-2013): The Next Generation Information Technology Summit, 26-27 Sept., 2013, p. 461-466. doi: 10.1049/cp.2013.2357 (IEEE Xplore & IET Digital Library).
- [8] Raza, K. & Jaiswal, R. (2013). Reconstruction and analysis of cancer-specific gene regulatory networks from gene expression profiles. *International Journal on Bioinformatics & Biosciences*, 3(2), 25-34, doi: 10.5121/ijbb.2013.3103
- [7] Hasan, H. & Raza, K. (2012). Clustering approach to unveiling relationships between gene regulatory networks. *International Journal of Computer Sciences*, World Academy of Science, Engineering & Technology, 6(5), 1307-1310.
- [6] Raza, K. & Mishra, A. (2012). A novel anticlustering filtering algorithm for the prediction of genes as a drug target. American Journal of Biomedical Engineering, 2(5), 206-2011, doi: 10.5923/j.ajbe.20120205.03
- [5] Raza, K. Patle, V.K. & Arya, S. (2012). A review on green computing for eco-friendly and sustainable IT. J. Comput. Intell. Electron. Syst. 1, 3-16, doi: 10.1166/jcies.2012.1023
- [4] Raza, K. & Parveen, R. (2012). Soft computing approach for modeling genetic regulatory networks. *Advances in Intelligent Systems and Computing*, 178, 1-11, Springer-Verlag Berlin Heidelberg, doi: 10.1007/978-3-642-31600-5_1

- [3] Raza, K. & Parveen, R. (2012). Evolutionary algorithms in genetic regulatory network model. *Journal of Advanced Bioinformatics Applications and Research*, 1(3), 271-280. (Global IF 1.057)
- [2] Farooqi, R. & Raza, K. (2011). A comprehensive study of CRM through data mining techniques. In *Proc. of the National Conference; NCCIST-2011*, p. 61-65.
- [1] Raza, K. (2010). Application of data mining in bioinformatics. *Indian Journal of Computer Science & Engineer*, 1(2), 114-118.

PREPRINTS

• Raza, K. & Ahmad, S. Principle, analysis, application and challenges of next-generation sequencing: a review. (Submitted to Int'l Journal).

BOOKS

Author:

Title: Reconstruction and Analysis of Biological

Networks Khalid Raza

Publisher: LAP Lambert Academic Publishing,

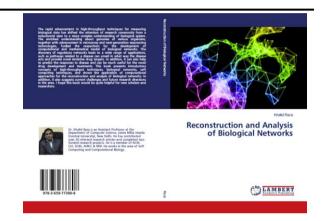
Germany

Pages: 212

ISBN: 978-3-659-77380-8

Price: **€ 69,90**

Available: www.amazon.in | www.morebooks.de



FUNDED RESEARCH PROJECTS

• Title: "Analysis of Microarray Data Using Artificial Intelligence Based Techniques"

Role: Principal Investigator, Duration: 2 Years (April, 2013 to March, 2015)

Funding Agency: University Grants Commission, India (1.85 Lakhs)

Status: Completed

• Title: "Machine learning-based methods for protein-protein interaction prediction"

Role: Principal Investigator, Duration: 6 Months (August, 2014 to Jan, 2015)

Funding Agency: Jamia Millia Islamia (under Innovative Research Activity), (1.0 Lakh)

Status: Completed

PHD GUIDANCE

S.No.	Name of the Scholars	Thesis Title	Status
1.	Abdul Manazir	Multi-Output Hybrid Genetic Programming Model	Ongoing
	(Registered under Visvesvaraya	for Efficient Prediction of Time Series Data	
	PhD Scheme, DeitY, GOI)		
2.	Nisar Iqbal Wani	Connecting Transcriptional Regulatory Networks	Ongoing
		with miRNA Regulatory Modules: An Integrative	
		Analysis of Gene Regulatory Networks	
3.	Sanjay	Targeting novel Cancer Testis antigens as anti-cancer	Ongoing
		Drug and immunotherapy targets through an in silico	
		approach against various Cancer cell lines	
4.	Tarun Kumar Gupta	Learning and Optimization of ANN Architecture	Ongoing
	_	using Nature-Inspired Techniques for Bioinformatics	
		Applications	
5.	Almas Jabeen	Statistical analysis of RNA-seq data: An investigation	Ongoing
	(Co-supervising with	for RNA signatures responsible for disease	
	Dr. Nadeem Ahmad, Deptt. of	<u> </u>	
	Biosciences, JMI)		

TALK/SEMINAR / PRESENTATION DELIVERED

- [14] Delivered an invited lecture on "Data Mining Applications in Management" in one day seminar on 'IT and Operations', organized by Bharatiya Vidya Bhavan's Usha and Lakshmi Mittal Institute of Management, New Delhi on April 2, 2016.
- [13] Presented a paper "M5 Model Tree and Gene Expression Programming for the Prediction of Metrological Parameters" in IEEE 2015 International Conference on Computers, Communications, and Systems (ICCCS-2015), Kanyakumari, India during Nov 2-3, 2015.
- [12] Delivered an invited lecture on "Data Storage and Analysis using MS-Access and Google Docs" in ICSSR Training Program on 'Research Methodology Course for Ph.D. Students in Social Sciences', held at GIS Lab of the Department of Geography, Jamia Millia Islamia, New Delhi during March 13-24, 2015.
- [11] Presented a paper "Ant Colony Optimization for Inferring Key Gene Interactions" in 9th INDIACom-2015, 2nd International Conference on Computing for Sustainable Global Development, New Delhi during March 11-13, 2015.
- [10] Delivered a Ph.D. pre-submission seminar on "Soft computing approaches for modelling biological networks" at the Department of Computer Science, Jamia Millia Islamia on 29th January, 2014.
- [9] Presented a paper "Reverse engineering of genetic regulatory networks using clustering technique" in International Conference on Technological Advancement and Research (ICTAR-2013), Goa, India during December 18-19, 2013.
- [8] Delivered an invited lecture on "Computational Systems Biology: Overview & Recent Developments" in CEP Course on "Advances in Soft-Computational Technique for Image Processing for Defence Application" held at INMAS, DRDO, New Delhi during Oct 28 –Nov 1, 2013.
- [7] Presented a paper "Reconstruction of gene regulatory network of colon cancer using information theoretic approach" in 4th International Conference CONFLUENCE-2013, Noida during Sept 26-27, 2013.
- [6] Delivered an invited lecture on "Artificial Intelligence Based Techniques for Weather Forecasting" in UGC Sponsored National Conference on Education and Research Scenario of Mathematical and Computer Science, held at Raipur during Jan 29-30, 2013.
- [5] Presented a paper "Soft Computing Approach for Modeling Genetic Regulatory Networks" in 2nd International Conference on Artificial Intelligence, Soft Computing and Applications, Chennai during July 13-15, 2012.
- [4] Delivered a lecture on "Bioinformatics Toolbox for Matlab" in the Workshop on Bioinformatics Infrastructure & Frontiers (BIF'12) held during 13-14 March, 2012 at the Department of Computer Science, Jamia Millia Islamia.
- [3] Presented a paper "A Comprehensive Study of CRM through Data Mining Techniques" at the National Conference; NCCIST-2011 held on September 09, 2011 at Apeejay School of Management, New Delhi.
- [2] Delivered a presentation on "How to write a research paper?" at the Department of Computer Science, Jamia Millia Islamia during Pre-Ph.D. course work, 2011.
- [1] Delivered a presentation on "Soft computing approaches for modelling biological networks: a literature review report" at the Department of Computer Science, Jamia Millia Islamia on 11th May, 2011 for the partial fulfilment of Pre-Ph.D. course work.

SEMINARS / CONFERENCES / WORKSHOPS ATTENDED

- [20] Attended 3-days 'National Instructional Workshop on Cryptology' organized by Department of Computer Science, Central University of Rajasthan, [April 6-8, 2016]
- [19] Attended TEQIP II Sponsored One-Week FDP on Optimization Techniques using Nature Inspired Algorithms for Engineering Applications at Rajasthan Technical University, Kota [Jan 19-23, 2015]
- [18] Attended 110th 4-Weeks Orientation Programme at Academic Staff College, Jamia Millia Islamia, New Delhi [Nov 11 to Dec 8, 2014]
- [17] Attended 4th 3-Weeks Refresher Course in Basic Sciences (Interdisciplinary) at Academic Staff College, Jamia Millia Islamia, New Delhi [May 12 to June 2, 2014]

- [16] International Conference Technological Advancement and Research (ICTAR-2013), Goa International Centre, Goa, India [December 18-19, 2013].
- [15] International Conference CONFLUENCE-2013: The Next Generation Information Technology Summit, Amity University, Noida [Sept 26-27, 2013].
- [14] XXIV Annual Bioinformatics Coordinator's Meeting organized by Department of Biotechnology, Ministry of Science & Technology, Govt. of India at Lucknow [Feb.3-4, 2013].
- [13] Faculty Development Program (FDP) organized by Tata Consultancy Services (TCS) under Academic Interface Program at BVICAM, New Delhi [July 21, 2012]
- [12] International Conference on Artificial Intelligence, Soft Computing and Applications (AIAA-2012), Chennai [July 13-15, 2012]
- [11] International School on Networks in Biology, Social Science and Engineering organized by IMI, Indian Institute of Science, Bangalore [July 02-11, 2012]
- [10] Eight-weeks Indian Academy of Sciences (IASc-INSA-NASI) Summer Research Fellowship Programme and worked at IIT Bombay [May 01–Jun 30, 2012].
- [9] Science Academies Workshop On Frontiers in Science & Engineering, jointly organized by Indian National Science Academy (INSA) and University of Delhi [February 17-18, 2012]
- [8] Workshop on "Green Computing/IT" delivered by Prof. Sartaj Sahini organized by Faculty of Engg. & Tech., Jamia Millia Islamia [December 8, 2011]
- [7] National Conference on "Challenges in Information Systems & Technology: Computational Techniques & Business Intelligence" organized by Apeejay School of Management, New Delhi [September 09, 2011]
- [6] Symposium on "R & D in Computer Science" organized by Department of Computer Science, Jamia Millia Islamia, New Delhi [March 13, 2011]
- [5] Workshop on "Emerging Trends in ICT- based Learning" organized by CIT, Jamia Millia Islamia [21st March 2011]
- [4] National Conference on "Sustainable Development and Management of Information Technology in Universities & Colleges (SUDMIT-2010)" organised by Centre for Information Technology, Jamia Millia Islamia, New Delhi [March 25-26, 2010]
- [3] Conference on "Sustainable Development and Management of Information Technology in Universities & Colleges" organised by Centre for Information Technology, Jamia Millia Islamia, New Delhi [February 26-27, 2008]
- [2] Workshop on "Web 2.0 in Education" organised by Centre for Information Technology, Jamia Millia Islamia, New Delhi [Nov 4, 2008]
- [1] Workshop on "IT for All" organised by Centre for Information Technology, Jamia Millia Islamia, New Delhi [October 31 Nov. 1, 2007]

RESEARCH FELLOWSHIPS / HONOURS

- **Session Chair**: Chaired a technical session in DBT-BIF 6th National Workshop on Advances in Computational Biology & Bioinformatics (ACBB-2015) held at DCS, JMI during Feb 27-28, 2015.
- **Session Chair**: Chaired a technical session in UGC Sponsored National Conference on Education and Research Scenario of Mathematical and Computer Science, held at Raipur during Jan 29-30, 2013.
- **Session Chair**: Chaired a technical session in 2nd International Conference on Artificial Intelligence, Soft Computing and Applications, Chennai during July 13-15, 2012.
- Received Indian Academy of Sciences (IASc-INSA-NASI) Summer Research Fellowship for two
 months and worked at IIT Bombay during May 01 June 30, 2012.

MEMBERSHIP OF PROFESSIONAL BODIES / COMMITTEES

- Life Member, Computer Society of India (CSI) (Member ID: 01060359)
- Life Member, Soft Computing Research Society (SCRC).
- Member, Association for Computing Machinery (ACM) (Member ID: 8121039)

- Member, Academy and Industry Research Collaboration Centre (AIRCC) (Member ID: 128770)
- Member, Scientific Committee & Editorial Review Board on Engineering and Physical Sciences, World Academy of Science, Engineering and Technology.
- Member National Advisory Committee, UGC Sponsored National Conference on Education and Research Scenario of Mathematical and Computer Science, held at Raipur during Jan 29-30, 2013.
- Conference Review Committees / PCM WeST-2013, AIAA-2013, ACITY-2013, <u>AISC-2014</u>, <u>ICCSB-2014</u>, <u>ICSC-2015</u>, <u>ICIUS 2015</u>, <u>AIAA-2015</u>, <u>GTIE-2016</u>, <u>ICGCET-2016</u>, <u>INDIACom-2017</u>,

REVIEWER

- BMC Bioinformatics
- Current Bioinformatics, Bentham Science Publishers
- Intelligent Automation & Soft Computing, Taylor & Francis
- Neural Computing and Applications, Springer
- Advances in Electrical and Electronic Engineering, Czech Republic
- International Journal on Bioinformatics & Biosciences, Australia
- International Journal of Bioinformatics Research and Applications
- SpringerPlus, Germany

COURSES TAUGHT

Current Teaching Assignments:

Advance Java (J2EE) [MCA III Yr., 2016-17]
 Core Java (J2SE) [MCA II Yr., 2016-17]
 Bioinformatics Fundamentals [M.Sc. Bioinformatics I Yr., 2016-17]

• Artificial Intelligence (AI) [M.Sc. Tech. III Yr., 2016-17]

Previous Teaching Assignments:

Bioinformatics Fundamentals
 [M.Sc. Bioinformatics, 2011-12, 2012-13, 2015-16]
 [M.Sc. Biochemistry, 2014-15, 2015-16]

Programming & Problem Solving [M.Sc. Tech. I Yr., 2011-12-13-14-15-16]

• Object-oriented Programming [B.Sc. III Yr., 2010-11, MCA I Yr, 2011-12-13-14-15].

Operating Systems [PGDCA, 2012-13,

MCA II Yr. 2013-14, 2014-15, 2015-16]
Multimedia Technologies & Applications [B.Sc. III Yr., 2010-11] [PGDCA, 2011-12]

• Website Designing & Management [PGDCA 2010-11, 2011-12, 2012-13, B.Sc. 2013-14]

Advance Databases [MCA, III Yr., 2010]
Object-Oriented Analysis & Design [MCA, II Yr., 2010]

Introduction to Computers [Diploma Engg., 2008/2009]

• Advance Java / Internet Technologies [M.Sc. Tech II Yr., 2011-12, 2012-13, 2013-14, 2014-15]

[MCA III Yr., 2012-13, 2014-15, 2015-16]

OTHER ACADEMIC/ADMINISTRATIVE RESONSIBILITIES

- Warden (Hostel), Hall of Boys' Residence Campus 'B', Jamia Millia Islamia since Jul'2016.
- Coordinator, Departmental Library, Department of Computer Science, JMI since Jul'2014
- Convener, Board of Studies/Department Faculty Committee, Department of Computer Science, JMI since May'2015.
- Coordinator, Department Curriculum Committee since May'2016.
- Member, Board of Studies, Department of Computer Science, JMI since Dec'2010
- Coordinator, PGDCA Programme [Jul'2012 to Jul'2014]

- Member, Bioinformatics Research Facility since Mar'2011
- Member, Departmental Lab/Purchase Committee since Jul'2012
- Member, Departmental Examination Committee since Jan'2013
- Member, Subject Association since [Mar'2011 to Feb'2016]
- Member, Moderation Committee for M.Sc. Bioinformatics, PGDCA and B.Sc.
- Member Organizing Committee of Workshop on BIF'12 organized during Mar 13-14, 2012
- Member, Syllabus Design/Revision Committee for B.A./B.Sc. Credit-Based System, 2012
- Document Verification Officer during MCA/PGDCA admission [Jun 24-28, 2011]
- Nominated as "Inspired Faculty" of the Department, Jamia Millia Islamia.
- Internal/External Examiner, Evaluator MCA, M.Sc. (Bioinformatics), M.Sc. Tech, PGDCA, B.Sc.
- Manager Table Tennis Team, F/o Nature Sciences, JMI in 2015 & 2016 Inter-Faculty Tournament.
- **Co-Convener** DBT-BIF 6th National Workshop on Advances in Computational Biology & Bioinformatics (ACBB-2015) held at DCS, JMI during Feb 27-28, 2015.
- **Tabulator**, Exam Branch, Jamia Millia Islamia.
- **Monitoring Observer,** DMAT-2015 Re-Examination, conducted by Admission & Fee Regulatory Committee (AFRC), Bhopal, M.P.
- Member Hospitality Committee of Annual Convocation 2016, Jamia Millia Islamia.

SOFTWARE ACADEMIC PROJECTS GUIDED

• Project guided at Post-Graduate level of various university like JMI, Jamia Hamdard, IGNOU, Amity University = 50, selected dissertation titles are attached as annexure.

SOFTWARE TRAINING

• Undergone three months full-time software development training program using JAVA/J2EE/STRUTS from DUCAT Training Centre, Noida during Oct-Dec, 2006.

PRACTICAL EXPERTISE

Operating System	UNIX, LINUX, MS-DOS, MS-Windows		
Web Development Tools	J2EE (Servlet, JSP, EJB, JMS, CORBA), Struts, PHP, AJAX, Dreamweaver, Eclipse, etc.		
Web Servers/Containers	Apache Tomcat, Web Logic, JBoss, WAMP		
Databases	Oracle, SQL Server, MySQL		
Programming Languages	C, C++, J2SE, J2EE, Basics of Assembly & LISP Programming		
Graphics & Animation Tools	Photoshop, CorelDraw, Inkscape, Macromedia MX Flash		
Mathematical/Data Mining/ Machine Learning Tools	Matlab, Weka, RapidMiner, Neuro Solutions, GPDotNet, GeneXProTools, SPSS, etc.,		
Bioinformatics Tools	BLAST, EMBOSS, Clustal Omega, MEGA, Phylip, GNA, Cytoscape, Pymol, etc.		

PERSONAL DETAILS

Father's Name Late Abdul Jabbar Quais

Mother's Name Zulekha Khatoon

Marital Status Single

Nationality/Sex Indian/Male

Languages Known English, Hindi & Urdu

REFEREES

• Prof. Khurram Mustafa

Ex-Head, Department of Computer, Jamia Millia Islamia, New Delhi-110025 Tel. +91-11-26981717 Extn. 3450 | Email: kmfaroogi [at] yahoo.com

• Prof. S.A.M. Rizvi

Professor & Head, Department of Computer Science, Jamia Millia Islamia Tel. +91-11-26981717 Extn. 3450 | Email: sarizvi [at] jmi.ac.in

• **Prof. M. Sami,** FASc, FNASc.

Director, Centre for Theoretical Physics, Jamia Millia Islamia, New Delhi-110025 Tel. +91-11-26984830 | Email: samijamia [at] gmail.com

Updated on October 03, 2016