

# Dr. Khalid Raza

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RESEARCHERID



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Citations: 1760

H-Index: 23

i10-Index: 50

## 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

- **Associate Professor** at the **Department of Computer Science, Jamia Millia Islamia (Central University)**, New Delhi, India. (15-12-2022 to till date).
- **Assistant Professor** at the **Department of Computer Science, Jamia Millia Islamia (Central University)**, New Delhi, India. (03-12-2010 to 14-12-2022).
- Worked as **Visiting Professor to ICCR Chair** at **Faculty of Computer and Information Sciences, Ain Shams University**, Cairo, Egypt for two semesters (2017-2018). Selected and deputed by ICCR, Ministry of External Affairs, Government of India.

## 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

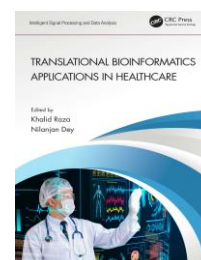
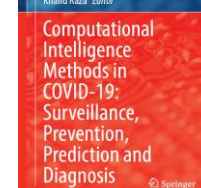
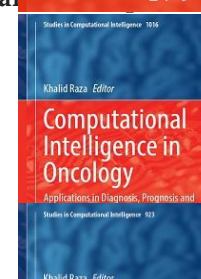
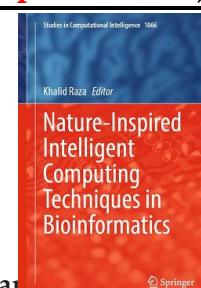
- Computational Biology & Bioinformatics (Biological Networks Modeling, Microarray and Next-Generation Sequencing Analysis, Computational Systems Biology)

- Soft Computing Techniques & Applications

## RESEARCH PUBLICATIONS (Selected out of total 100: WoS/ PubMed/Scopus Indexed)

### Books Edited/Authoried (6)

- [6] **Raza, K.** (Ed.)  
**Nature-Inspired Intelligent Computing Techniques in Bioinformatics.**  
*Studies in Computational Intelligence Series*, 1066, 2023, **Springer**.  
 ISBN 978-981-19-6378-0.  
<https://link.springer.com/book/10.1007/978-981-19-6379-7>
- [5] **Raza, K.** (Ed.)  
**Computational Intelligence in Oncology: Applications in Diagnosis, Prognosis and Treatment of Cancers.**  
*Studies in Computational Intelligence Series*, 1016, 2022, **Springer**.  
 ISBN 978-981-16-9220-8.  
<https://link.springer.com/book/9789811692208>
- [4] **Raza, K.** (Ed.)  
**Computational Intelligence Methods in COVID-19: Surveillance, Prevention, Prediction and Diagnosis.**  
*Studies in Computational Intelligence Series*, 923, 2020, **Springer**.  
 ISBN 978-981-15-8533-3.  
<https://www.springer.com/gp/book/9789811585333>
- [3] **Raza, K.**, and Dey, N. (Eds).  
**Translational Bioinformatics Applications in Healthcare.**  
*CRC FOCUS Series*, 2021, **CRC Press**  
 ISBN 978-0-367-70570-1  
<https://doi.org/10.1201/9781003146988>
- [2] **Raza, K.**, and Dey, N. (Eds).  
**Translational Bioinformatics in Healthcare and Medicine.**  
*Advances in Ubiquitous Sensing Application for Healthcare series*, Vol. 13, **Elsevier**,  
 ISBN 978-0-323-89824-9 (2021)  
<https://www.elsevier.com/books/translational-bioinformatics-in-healthcare-and-medicine/raza/978-0-323-89824-9>
- [1] **Raza, K.**  
**Reconstruction and Analysis of Biological Networks.**  
*LAP Lambert Academic Publishing*, Germany.  
 ISBN: 978-3-659-77380-8.



### Journals (60)

- [60] Satyam, R., Ahmad, S. & **Raza, K.** (2023). **Comparative genomic assessment of members of Genus Tenacibaculum: An exploratory study.** *Molecular Genetics and Genomics*, **Springer**. (In Press) (IF 2.980)
- [59] Rana, M., Ahmedi, S., Fatima, A., Ahmad, S., Nouman, Siddiqui, N., **Raza, K.**, Manzoor, N., Javed, S. & Rahisuddin (2023). **Synthesis, Single crystal, TD-DFT, Molecular Dynamics Simulation and DNA binding studies of Carbothioamide Analog.** *Journal of Molecular Structure*, **Elsevier**.  
<https://doi.org/10.1016/j.molstruc.2023.135701> (IF 3.841)
- [58] Ahmad, S., Singh, V., Gautam, H., & Raza, K. (2023). **Multisampling-based docking reveals Imidazolidinyl urea as a multitargeted inhibitor for Lung Cancer: An optimisation followed multi-simulation and In-vitro study.** *Journal of Biomolecular Structure & Dynamics*, **T&F**.  
<https://doi.org/10.1080/07391102.2023.2209673> (IF 5.235)

- [57] Ahmad, S. & Raza, K. (2023). Identification of 5-Nitroindazole as a multitargeted inhibitor for CDK and 1 transferase kinase in Lung Cancer: A Multisampling algorithm-based structural study. *Molecular Diversity*, Springer. <https://doi.org/10.1007/s11030-023-10648-0> (IF 3.364)
- [56] Sahu, A., Raza, K., Pradhan, D., Jain, A.K., Verma, S. (2023). COX-2 as a therapeutic target against human breast cancer: A comprehensive review. *WIREs Mechanisms of Disease*, e1596. <https://doi.org/10.1002/wsbm.1596> (IF 7.288)
- [55] Yang, L., Bhat, A.M., Qazi, S. & Raza, K. (2023). DLC1 as druggable target for specific subsets of gastric cancer: An RNA-seq based study. *Medicina*, 59(3): 514. <https://doi.org/10.3390/medicina59030514> (IF 2.948)
- [54] Shah, A.A., Ahmad, S., Yadav, M.K., Raza, K., Akhtar, S. (2023). Structure-based virtual screening, molecular docking, molecular dynamics simulation, and metabolic reactivity studies of quinazoline derivatives for their anti-EGFR activity against tumour angiogenesis. *Current Medicinal Chemistry*. <https://doi.org/10.2174/0929867330666230309143711> (IF 4.740)
- [53] Famuyiwa, S.O., Ahmad, S., Fakola, E.G., Olusola, A., Adesida, S., Obagunle, F., Raza, K. et al. (2023). Comprehensive computational studies of naturally occurring kuguacins as antidiabetic agents by targeting visfatin. *Chemistry Africa*, Springer. <https://doi.org/10.1007/s42250-023-00604-8>
- [52] Sahu, A., Raza, K., Pradhan, D., Jain, A.K., Verma, S. (2023). COX-2 as a therapeutic target against human breast cancer: A comprehensive review. *WIREs Mechanisms of Disease*, Wiley, (In Press). <https://doi.org/10.1002/wsbm.1596> (IF 7.288)
- [51] Pan, S., Gupta, T.K., & Raza, K. (2023). BatTS: a hybrid method for optimizing deep feedforward neural network. *PeerJ Computer Science*, 8:e1194. <http://dx.doi.org/10.7717/peerj-cs.1194> (IF 2.41)
- [50] Qazi, S., Khanna, K., & Raza, K. (2023). Dihydroquercetin (DHQ) has the potential to promote apoptosis in ovarian cancer cells: An in silico and in vitro study. *Journal of Molecular Structure*, Elsevier, 1271: 134093. <https://doi.org/10.1016/j.molstruc.2022.134093> (IF 3.841)
- [49] Sahu, A., Verma, S., Pradhan, D., Raza, K., Qazi, S., Jain, A.K. (2023). Computational screening for finding new potent cox-2 inhibitors as anticancer agents. *Letters in Drug Design & Discovery*, 20(2): 213- 224. <http://dx.doi.org/10.2174/1570180819666220128122553> (IF 1.15)
- [48] Yadav, M.K., Ahmad, S., Raza, K., Kumar, S., Eswaran, M., Pasha KM. (2023). Predictive modeling and therapeutic repurposing of natural compounds against receptor-binding domain of SARS-CoV-2. *Journal of Biomolecular Structure & Dynamics*, Taylor & Francis, 41(5): 1527-1539. <https://doi.org/10.1080/07391102.2021.2021993> (IF 3.392)
- [47] Ahmad, S., Sayeed, S., Bano, N., Sheikh, K. & Raza, K. (2022). In-silico analysis reveals Quinic acid as a multitargeted inhibitor against Cervical Cancer. *Journal of Biomolecular Structure & Dynamics*, <https://doi.org/10.1080/07391102.2022.2146202> (In Press). (IF 5.235)
- [46] Barh, D., Tiwari, S., Rodrigues Gomes, L.G. et al. (2022). SARS-CoV-2 Variants Show a Gradual Declining Pathogenicity and Pro-Inflammatory Cytokine Stimulation, an Increasing Antigenic and Anti-Inflammatory Cytokine Induction, and Rising Structural Protein Instability: A Minimal Number Genome-Based Approach. *Inflammation*, Springer. <https://doi.org/10.1007/s10753-022-01734-w> (IF 4.657)
- [45] Ahmad, S., Kaul, T., Chitkara, P. & Raza, K. (2022). Comparative insight into Rice chloroplasts genome: Mutational Phylogenomics reveals Echinochloa oryzicola as the ongoing progenitor of rice. *Genetic Resources and Crop Evolution*, Springer, (In Press). <https://doi.org/10.1007/s10722-022-01471-x> (IF 1.876)
- [44] Sharma, N., Kulkarni, G.T., Bhatt, A.N., Satija, S., Singh, L., Sharma, A., Dua, K., Karwasra, R., Khan, A.A., Ahmad, N. & Raza, K. (2022). Therapeutic options for the SARS-CoV-2 virus: Is there a key in herbal medicine? *Natural Product Communications*, 17(9): 1-10. <https://doi.org/10.1177/1934578X221126303> (IF 1.496)
- [43] Karwasra, R., Ahmad, S., Bano, N., Qazi, S., Raza, K., Singh, S., & Varma, S. (2022). Macrophage targeted punicalagin nanoengineering to alleviate Methotrexate Induced Neutropenia: A molecular docking, DFT and MD simulation analysis. *Molecules*, MDPI, 27(18): 6034. <https://doi.org/10.3390/molecules27186034> (IF 4.927)

- [42] Qazi, S., Jit, B.P., Das, A., Karthikeyan, M., Saxena, A., Ray, M.D., Singh, A.R., **Raza, K.**, Jayaram, B., Sharma, A. (2022). **BESFA: bioinformatics based evolutionary, structural & functional analysis of prostrate, Placenta, Ovary, Testis, and Embryo (POTE) paralogs.** *Heliyon*, **CellPress**, e10476. <https://doi.org/10.1016/j.heliyon.2022.e10476> (IF 3.776)
- [41] Hou, J., Bhat, A.M., Ahmad, S., **Raza, K.** & Qazi, S. (2022). **In silico Analysis of ACE2 Receptor to Find Potential Herbal Drugs in COVID-19 Associated Neurological Dysfunctions.** *Natural Product Communications*, 17(8): 1–15. <https://doi.org/10.1177/1934578X221118549> (IF 1.496)
- [40] Ahmad, S., Bano, N, Qazi, S., Yadav, M. Ahmad, N., & **Raza, K.** (2022). **Multitargeted molecular dynamic understanding of Butoxypheser against SARS-CoV-2: An in-silico study.** *Natural Product Communications*, 17(7): 1-13. <https://doi.org/10.1177/1934578X221115499> (IF 1.496)
- [39] Jabeen, A., Ahmad, N. & **Raza, K.** (2022). **Global Gene Expression and Docking Profiling of COVID-19 Infection.** *Frontiers in Genetics*, 13: 870836. <https://doi.org/10.3389/fgene.2022.870836> (IF 4.599)
- [38] Singh, N.K., & **Raza, K.** (2022). **Progress in Deep Learning-Based Dental and Maxillofacial Image Analysis: A Systematic Review.** *Expert Systems with Applications*, **Elsevier**, 199: 116968. <https://doi.org/10.1016/j.eswa.2022.116968> (IF 6.954)
- [37] Ahmad, S., Pasha K.M., **Raza, K.**, Eswaran, M., Yadav, M.K. (2022). **Reporting Dinaciclib and Theodrenaline as a Multitargeted Inhibitor against SARS-CoV-2: An in-silico Study.** *Journal of Biomolecular Structure & Dynamics*, **Taylor & Francis**, <https://doi.org/10.1080/07391102.2022.2060308> (In Press). (IF 3.392)
- [36] Khuntia, B., Sharma, V., Wadhawan, M., Chhabra, V., Kidambi, B., Rathore, S., Agrawal, A., Ram, A., Qazi, S., Ahmad, S., **Raza, K.**, Sharma, G. (2022). **Antiviral potential of Indian medicinal plants against Influenza and SARS-CoV: A systematic review.** *Natural Product Communications*, 17(3): 1–10. <http://dx.doi.org/10.1177/1934578X221086988> (IF 0.986)
- [35] Wani, N., Barh, D. & **Raza, K.** (2021). **Modular network inference between miRNA–mRNA expression profiles using weighted co-expression network analysis.** *Journal of Integrative Bioinformatics*, 18(4): 20210029. <https://doi.org/10.1515/jib-2021-0029> (IF 3.321)
- [34] Qazi, S. & **Raza, K.** (2021). **In silico approach to understand epigenetics of POTE in ovarian cancer.** *Journal of Integrative Bioinformatics*, 18(4): 20210028. <https://doi.org/10.1515/jib-2021-0028> (IF 3.321)
- [33] Isa, M.A., Mustapha, A., Qazi, S., **Raza, K.**, Allamin, I.A., Ibrahim, M.M., & Mohammed, M.M. (2022). **In silico Molecular Docking and Molecular Dynamic Simulation of Potential Inhibitors of 3C-Like Main Proteinase (3CLpro) from Severe Acute Respiratory Syndrome-2 (SARS-CoV-2) using Selected African Medicinal Plants.** *Advances in Traditional Medicine*, **Springer**, 22, 107–123. <https://doi.org/10.1007/s13596-020-00523-w> (IF 0.90)
- [32] Rai, A., Qazi, S., & **Raza, K.** (2022). **In silico analysis and comparative molecular docking study of FDA approved drugs with Transforming Growth Factor Beta receptors in Oral Submucous Fibrosis.** *Indian Journal of Otolaryngology and Head & Neck Surgery*, **Springer**, 74 (Suppl 2), 2111–2121. <https://doi.org/10.1007/s12070-020-02014-5> (IF 0.390)
- [31] Satyam, R., Yousef, M., Qazi, S., Bhat, A.M., & **Raza, K.** (2021). **COVIDium: A COVID-19 Resource Compendium.** *Database*, **Oxford University Press**, 2021: baab057. <https://doi.org/10.1093/database/baab057> (IF 3.451)
- [30] Khuntia, B., Sharma, V., Qazi, S., Das, S., Sharma, S., **Raza, K.** & Sharma, G. (2021). **Ayurvedic medicinal plants against COVID-19: an in silico analysis.** *Natural Product Communications*, 16(11): 1–9. <https://doi.org/10.1177/1934578X211056753> (IF 0.986)
- [29] Qazi, S., Das, S., Khuntia, B., Sharma, V., Sharma, S., Sharma, G., & **Raza, K.** (2021). **In silico molecular docking and molecular dynamic simulation analysis of phytochemicals from Indian foods as potential inhibitors of SARS-CoV-2 RdRp and 3CLpro.** *Natural Product Communications*, 16(9): 1–12. <https://doi.org/10.1177/1934578X211031707> (IF 0.986)
- [28] Yang, X., Alam, A., Iqbal, N. & **Raza, K.** (2021). **Repurposing of FDA-approved drugs to predict new inhibitors against key regulatory genes in Mycobacterium tuberculosis.** *Biocell*, 45(6): 1569–1583. <https://doi.org/10.32604/biocell.2021.017019> (IF 1.254)



- [27] Khan, S., Akrema, Qazi, S., Ahmad, R., Raza, K., Rahisuddin \* (2021). **In Silico and Electrochemical studies for ZnO-CuO Based Immunosensor for Sensitive and Selective Detection of E. coli.** *ACS Omega*, American Chemical Society, 6(24): 16076-16085. <https://doi.org/10.1021/acsomega.1c01959> (IF 3.512)
- [26] Zhang, Y., Qazi, S., & Raza, K. (2021). **Differential expression analysis in Ovarian Cancer: A functional genomics and systems biology approach.** *Saudi Journal of Biological Sciences*, Elsevier, 28(7): 4069-4081. <https://doi.org/10.1016/j.sjbs.2021.04.022> (IF 4.219)
- [25] Qazi, S., & Raza, K. (2021). **Phytochemicals from Ayurvedic plants as potential medicaments for Ovarian cancer: An in silico analysis.** *Journal of Molecular Modeling*, Springer, 27: 114. <https://doi.org/10.1007/s00894-021-04736-x> (IF 1.810)
- [24] Qazi, S., Sheikh, K. & Raza, K. (2021). **In silico approach to understand the epigenetic mechanism of SARS-CoV-2 and its impact on the environment.** *VirusDisease*, Springer, 32: 286-297. <https://doi.org/10.1007/s13337-021-00655-w>
- [23] Qazi, S., Sharma, A. & Raza, K. (2021). **The role of epigenetic changes in Ovarian Cancer: A review.** *Indian Journal of Gynecologic Oncology*, Springer, 19: 27. <https://doi.org/10.1007/s40944-021-00505-z>
- [22] Wani, N. & Raza, K. (2021). **MKL-GRNI: A Parallel Multiple Kernel Learning approach for supervised inference of large-scale gene regulatory networks.** *PeerJ Computer Science*, 7:e363. <https://doi.org/10.7717/peerj-cs.363> (IF 1.392)
- [21] Raza, K. & Singh, N.K. (2021). **A Tour of Unsupervised Deep Learning for Medical Image Analysis.** *Current Medical Imaging*, Bentham Science, 17(9): 1059-1077. <https://doi.org/10.2174/1573405617666210127154257> (IF 0.858)
- [20] Karwasra, R., Singh, S., Raza, K., Sharma, N., & Varma, S. (2020). **A brief overview on current status of nanomedicines for treatment of pancytopenia: focusing on chemotherapeutic regime.** *Journal of Drug Delivery Science and Technology*, Elsevier, 61, 102159. <https://doi.org/10.1016/j.jddst.2020.102159> (IF 3.981)
- [19] Karwasra, R., Faithi, S., Raza, K., Khanna, K., Sharma, N., Sharma, D., Singh, S., Varma, S. **Filgrastim loading in PLGA and SLN nanoparticulate system: A bioinformatics approach,** *Drug Development and Industrial Pharmacy*, Taylor & Francis, 46(8), 1354-1361. <https://doi.org/10.1080/03639045.2020.1788071> (IF 6.225)
- [18] Mazumder, J., Khan, E., Perwez, M., Gupta, M., Kumar, S., Raza, K., Sardar, M. **Enzyme-assisted synthesis of ZnO Nanoparticles, in silico studies and its effect on sustainable growth of Brassica juncea.** *Scientific Reports*, Nature, 10, 8531. <https://doi.org/10.1038/s41598-020-65271-y> (IF 4.379)
- [17] Gupta, T.K. & Raza, K. **Optimizing Deep Feedforward Neural Network Architecture: A Tabu Search Based Approach.** *Neural Processing Letters*, Springer, 51: 2855-2870 (IF2.908)
- [16] Wani, N., & Raza, K. (2019). **iMTF-GRN: Integrative Matrix Tri-factorization for Inference of Gene Regulatory Networks.** *IEEE Access*, 7: 126154-126163 <https://doi.org/10.1109/ACCESS.2019.2936794> (IF 3.337)
- [15] Wani, N., & Raza, K. (2019). **Integrative approaches to reconstruct regulatory networks from multi-omics data: A review of state-of-the-art methods.** *Computational Biology and Chemistry*, Elsevier, 83: 107120. <https://doi.org/10.1016/j.compbiolchem.2019.107120> (IF 2.877)
- [14] Khatoon, N., Alam, H., Khan, A., Raza, K. & Sardar, M. (2019). **Ampicillin Silver Nanoformulations against Multidrug resistant bacteria.** *Scientific Reports*, 9: 6848. <https://doi.org/10.1038/s41598-019-43309-0> (IF 4.379)
- [13] Raza, K. (2018). **Fuzzy logic based approaches for gene regulatory network inference.** *Artificial Intelligence in Medicine*, Elsevier, 97: 189-203. <https://doi.org/10.1016/j.artmed.2018.12.004> (IF 5.326)
- [12] Kumar, S., Ahmad, S., Siddiqi, M.I. & Raza, K. (2019). **Mathematical Model for Plant-Insect Interaction with Dynamic Response to PAD4-BIK1 Interaction and Effect of BIK1 Inhibition.** *BioSystems*, Elsevier, 175(2019): 11-23. <https://doi.org/10.1016/j.biosystems.2018.11.005> (IF 1.973)

- [11] Manazir, A. & **Raza, K.** (2019). Recent developments in Cartesian Genetic Programming and its variants. *ACM Computing Surveys*, 51(6): 122. <http://dx.doi.org/10.1145/3275518> (IF 10.282)
- [10] Faiza, M., Tanveer, K., Fatihi, S., Wang, Y. & **Raza, K.** (2019). Comprehensive overview and assessment of miRNA target prediction tools in human and drosophila melanogaster. *Current Bioinformatics*, 14(5): 432-445. <https://doi.org/10.2174/1574893614666190103101033> (IF 3.543)
- [9] **Raza, K.** & Ahmad, S. (2019). Recent Advancement in Next-Generation Sequencing Techniques and its Computational Analysis. *International Journal of Bioinformatics Research and Applications*, **Inderscience**, 15(3): 191-220. <https://dx.doi.org/10.1504/IJBRA.2019.10022508> (CiteScore 0.50)
- [8] Khan, F.N., Qazi, S., Tanveer, K. & **Raza, K.** (2017). A Review on the Antagonist Ebola: A Prophylactic Approach. *Biomedicine & Pharmacotherapy*, **Elsevier**, 96: 1513-1526. <https://doi.org/10.1016/j.biopha.2017.11.103> (IF 6.529)
- [7] **Raza, K.** (2017). Formal Concept Analysis for Knowledge Discovery from Biological Data. *International Journal of Data Mining and Bioinformatics*, **Inderscience**, 18(4): 281-300. <https://doi.org/10.1504/IJDMB.2017.10009312> (IF 0.667)
- [6] **Raza, K.**, & Alam, M. (2016). Recurrent Neural Network Based Hybrid Model for Reconstructing Gene Regulatory Network. *Computational Biology and Chemistry*, **Elsevier**, 64: 322-334. <http://doi.org/10.1016/j.compbiolchem.2016.08.002> (IF 2.877)
- [5] **Raza, K.** (2016). Reconstruction, Topological and Gene Ontology Enrichment Analysis of Cancerous Gene Regulatory Network Modules. *Current Bioinformatics*, 11(2): 243-258. <http://doi.org/10.2174/1574893611666160115212806> (IF 3.543)
- [4] **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*, **Inderscience**, 11(5): 397-416. <http://doi.org/10.1504/IJBRA.2015.071940> (CiteScore 0.50)
- [3] **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. <http://doi.org/10.1007/s40030-014-0092-9> (CiteScore 1.10)
- [2] **Raza, K.** (2014). Clustering Analysis of Cancerous Microarray Data. *Journal of Chemical and Pharmaceutical Research*, 6(9): 488-493.
- [1] Ahmad, S., Hamza, A. & **Raza, K.** (2013). PREs-Clustered Motifs in Drosophila melanogaster. *Res. J. Pharm., Biol. Chem. Sci.*, 4(4): 1100-1110.

### Book Chapters/Conference Proceedings (48)

- [48] Singh, N.K. & **Raza, K.** (2022). Detection of Treatment Types in Dental Panoramic X-Rays Using Deep Learning. In Proc. of 22nd International Conference Intelligent Systems Design and Applications (ISDA-2022), December 12-14, 2022. *Lecture Notes in Networks and Systems*, **Springer**, 646: 1-9. [https://doi.org/10.1007/978-3-031-27440-4\\_114](https://doi.org/10.1007/978-3-031-27440-4_114) (CORE-2021 Ranking 'C')
- [47] Singh, N.K. & **Raza, K.** (2023). TeethU2Net: A Deep Learning-Based Approach for Tooth Saliency Detection in Dental Panoramic Radiographs. In Proc. of 29th International Conference on Neural Information Processing (ICONIP 2022), CCIS 1794, **Springer**, 1794:1-11. [https://doi.org/10.1007/978-981-99-1648-1\\_19](https://doi.org/10.1007/978-981-99-1648-1_19) (CORE-2021 Ranking 'B')
- [46] Ahmad, S., Khan, F.N., Ramlal, A., Begum, S., Qazi S., & **Raza, K.** (2022). Nanoinformatics and nanomodeling: Recent developments in computational nanodrug design and delivery systems. *Emerging Nanotechnologies for Medical Applications*, **Elsevier**, 1-36. <https://doi.org/10.1016/B978-0-323-91182-5.00001-2>
- [45] Manazir, A. & **Raza, K.** (2022). pCGP: A Parallel Implementation of Cartesian Genetic Programming for Combinatorial Circuit Design and Time-Series Prediction. 2022 *International*

Conference on Electrical, Computer and Energy Technologies (ICECET), Prague, Czech Republic, **IEEE**, 1-4. <https://doi.org/10.1109/ICECET55527.2022.9872630>

- [44] Ahmad, S. et al. (2022). **Illustrious Implications of Nature-Inspired Computing Methods in Therapeutics and Computer-Aided Drug Design**. In: Raza, K. (eds) *Nature-Inspired Intelligent Computing Techniques in Bioinformatics, Studies in Computational Intelligence*, **Springer**, 1066: 293–308. [https://doi.org/10.1007/978-981-19-6379-7\\_15](https://doi.org/10.1007/978-981-19-6379-7_15)
- [43] Qazi, S., Khanam, A. & Raza, K. (2022). **Potential Role of the Nature-Inspired Algorithms for Classification of High-Dimensional and Complex Gene Expression Data**. In: Raza, K. (eds) *Nature-Inspired Intelligent Computing Techniques in Bioinformatics, Studies in Computational Intelligence*, **Springer**, 1066: 89–102. [https://doi.org/10.1007/978-981-19-6379-7\\_5](https://doi.org/10.1007/978-981-19-6379-7_5)
- [42] Qazi, W., Qazi, S., Iqbal, N. & Raza, K. (2022). **The Scope and Applications of Nature-Inspired Computing in Bioinformatics**. In: Raza, K. (eds) *Nature-Inspired Intelligent Computing Techniques in Bioinformatics, Studies in Computational Intelligence*, **Springer**, 1066: 3–18. [https://doi.org/10.1007/978-981-19-6379-7\\_1](https://doi.org/10.1007/978-981-19-6379-7_1)
- [41] Qazi, S. & Raza, K. (2022). **Integrative Analysis of Ovarian Serious Adenocarcinoma to Understand Disease Network Biology**. In *Lecture Notes in Bioinformatics*, **Springer**, 13347: 1-15. [https://doi.org/10.1007/978-3-031-07802-6\\_1](https://doi.org/10.1007/978-3-031-07802-6_1)
- [40] Gupta, T.K., & Raza, K. (2022). **Optimization of Artificial Neural Network: A bat algorithm-based approach**. In *Proc. of 21st International Conference Intelligent Systems Design and Applications*, December 13-15, 2021. *Lecture Notes in Networks and Systems*, **Springer**, 418: 286–295. [https://doi.org/10.1007/978-3-030-96308-8\\_26](https://doi.org/10.1007/978-3-030-96308-8_26) (CORE-2021 Ranking 'C')
- [39] Manazir, A., & Raza, K. (2022). **Comparative Evaluation of Genetic Operators in Cartesian Genetic Programming**. In *Proc. of 21st International Conference Intelligent Systems Design and Applications*, December 13-15, 2021. *Lecture Notes in Networks and Systems*, **Springer**, 418: 765–774. [https://doi.org/10.1007/978-3-030-96308-8\\_26](https://doi.org/10.1007/978-3-030-96308-8_26) (CORE-2021 Ranking 'C')
- [38] Qazi, S., Iqbal, N. & Raza, K. (2022). **Fuzzy Logic-Based Hybrid Models for Clinical Decision Support Systems in Cancer**. *Computational Intelligence in Oncology, Studies in Computational Intelligence (SCI)*, **Springer**, 1016: 1-13. [https://doi.org/10.1007/978-981-16-9221-5\\_12](https://doi.org/10.1007/978-981-16-9221-5_12)
- [37] Sahu, A., Qazi, S., Raza, K., Singh, A., Verma, S. (2022). **Machine Learning-Based Approach for Early Diagnosis of Breast Cancer Using Biomarkers and Gene Expression Profiles**. In: Raza, K. (eds) *Computational Intelligence in Oncology, Studies in Computational Intelligence (SCI)*, **Springer**, 1016: 285–306. [https://doi.org/10.1007/978-981-16-9221-5\\_17](https://doi.org/10.1007/978-981-16-9221-5_17)
- [36] Khan, F.N., Yousef, M. & Raza, K. (2022). **Machine Learning-Based Models in the Diagnosis, Prognosis and Effective Cancer Therapeutics: Current State-of-the-Art**. In: Raza, K. (eds) *Computational Intelligence in Oncology, Studies in Computational Intelligence (SCI)*, **Springer**, 1016: 17-52. [https://doi.org/10.1007/978-981-16-9221-5\\_2](https://doi.org/10.1007/978-981-16-9221-5_2)
- [35] Raza, K., Qazi, S., Sahu, A., & Varma, S. (2022). **Computational Intelligence in Oncology: Past, Present, and Future**. In: Raza, K. (eds) *Computational Intelligence in Oncology, Studies in Computational Intelligence (SCI)*, **Springer**, 1016: 1-16. [https://doi.org/10.1007/978-981-16-9221-5\\_1](https://doi.org/10.1007/978-981-16-9221-5_1)
- [34] Qazi, S., Khanam, A. & Raza, K. (2021). **Ebola Virus: Overview, Genome Analysis and Its Antagonists**. *Human Viruses: Diseases, Treatments and Vaccines*, **Springer**, 123-142. [https://doi.org/10.1007/978-3-030-71165-8\\_6](https://doi.org/10.1007/978-3-030-71165-8_6)
- [33] Alam, M.T. & Raza, K. (2021). **Blockchain technology In Healthcare: Making digital healthcare reliable, more accurate and revolutionary** *Translational Bioinformatics in Healthcare and Medicine*, **Elsevier**, 81-96. <https://doi.org/10.1016/B978-0-323-89824-9.00007-0>
- [32] Alam, A., Rashid, I. & Raza, K. (2021). **Application, Functionality and security issues of data mining techniques in healthcare informatics**. *Translational Bioinformatics in Healthcare and Medicine*, **Elsevier**, 149-156. <https://doi.org/10.1016/B978-0-323-89824-9.00012-4>
- [31] Ahmad, S., Qazi, S. & Raza, K. (2021). **Translational bioinformatics methods for drug discovery and drug repurposing**. *Translational Bioinformatics in Healthcare and Medicine*, **Elsevier**, 127-139. <https://doi.org/10.1016/B978-0-323-89824-9.00010-0>
- [30] Qazi, S. & Raza, K. (2021). **Translational Bioinformatics in Healthcare: Past, Present and Future**. *Translational Bioinformatics in Healthcare and Medicine*, **Elsevier**, 1-12. <https://doi.org/10.1016/B978-0-323-89824-9.00001-X>



- [29] Qazi, S., & **Raza, K.** (2021). **A Fuzzy Logic-based Knowledge System for Detection and Diagnosis of Childhood Autism.** *Handbook on Decision Support Systems for Neurological Disorders*, Elsevier, 55-69. <https://doi.org/10.1016/B978-0-12-822271-3.00016-5>
- [28] Sheikh, K. & **Raza, K.** (2021). **Viroinformatics and viral diseases: new era of interdisciplinary science for a thorough apprehension of virology** *Translational Bioinformatics Applications in Healthcare*, CRC Press, 109-132. <https://doi.org/10.1201/9781003146988-8>
- [27] Khan, F.N., **Raza, K.**, & Ahmad, S. (2021). **Clinical applications of Next-generation sequence analysis in Acute Myelogenous Leukaemia.** *Translational Bioinformatics Applications in Healthcare*, CRC Press, 41-66. <https://doi.org/10.1201/9781003146988-4>
- [26] Qazi, S., Iqbal, N. & **Raza, K.** (2021). **Artificial Intelligence in Medicine (AIM): Machine Learning in Cancer Diagnosis, Prognosis and Therapy.** *Artificial Intelligence for Data-Driven Medical Diagnosis*, DeGruyter, 103-126. <https://doi.org/10.1515/9783110668322-005>
- [25] Kumar, N. & **Raza, K.** (2021). **Medical Image Generation using Generative Adversarial Network: A Review.** *Health Informatics: A Computational Perspective in Healthcare, Studies in Computational Intelligence (SCI)*, Springer, 932: 77-96. [https://doi.org/10.1007/978-981-15-9735-0\\_5](https://doi.org/10.1007/978-981-15-9735-0_5)
- [24] Alam, A., Qazi, S., Iqbal, N. & **Raza, K.** (2020). **Fog, Edge and Pervasive computing in Intelligent IoT driven applications in Healthcare.** *Emerging trends and role of Fog, Edge and Pervasive Computing in Intelligent IoT driven applications*, IEEE-Wiley, 1-26. <https://doi.org/10.1002/9781119670087.ch1>
- [23] Sahu, A., Qazi, S., **Raza, K.**, Varma, S. (2020). **COVID-19: Hard road to find integrated computational drug repurposing pipeline.** *Computational Intelligence for COVID-19: Surveillance, Prevention, Prediction and Diagnosis, Studies in Computational Intelligence (SCI)*, Springer, 923: 295-309. [https://doi.org/10.1007/978-981-15-8534-0\\_15](https://doi.org/10.1007/978-981-15-8534-0_15)
- [22] Qazi, S., Ahmad, S. & **Raza, K.** (2020). **Using Computational Intelligence for Tracking COVID-19 Outbreak in Online Social Networks.** *Computational Intelligence for COVID-19: Surveillance, Prevention, Prediction and Diagnosis, Studies in Computational Intelligence (SCI)*, Springer, 923:47-59. [https://doi.org/10.1007/978-981-15-8534-0\\_3](https://doi.org/10.1007/978-981-15-8534-0_3)
- [21] **Raza, K.**, Maryam, Qazi, S. (2020). **An Introduction to Computational Intelligence for COVID-19: Surveillance, Prevention, Prediction, and Diagnosis.** *Computational Intelligence for COVID-19: Surveillance, Prevention, Prediction and Diagnosis, Studies in Computational Intelligence (SCI)*, Springer, 923: 3-18. [https://doi.org/10.1007/978-981-15-8534-0\\_1](https://doi.org/10.1007/978-981-15-8534-0_1)
- [20] **Raza, K.** (2020). **Artificial intelligence against COVID-19: A meta-analysis of current research.** *Big Data Analytics Intelligence Against COVID-19: Innovation Vision and Approach*, Springer, 78: 165-176. [https://doi.org/10.1007/978-3-030-55258-9\\_10](https://doi.org/10.1007/978-3-030-55258-9_10)
- [19] Sahu, A., Pradhan, D., **Raza, K.**, Qazi, S., Jain, A.K., & Verma, S. (2020). **In silico library design, screening and MD simulation of COX-2 inhibitors for anticancer activity.** In *Proc. of 12th International Conference on Bioinformatics and Computational Biology (BICOB-2020)*, San Francisco, CA, United States, March 23-25, 2020.
- [18] Qazi, S. & **Raza, K.** (2020). **Towards a VIREAL platform: Virtual reality in cognitive and behavioural training for Autistic individuals.** *Advanced Computational Intelligence Techniques for Virtual Reality in Healthcare, Studies in Computational Intelligence SCI*, Springer, 875: 25-47. [https://doi.org/10.1007/978-3-030-35252-3\\_2](https://doi.org/10.1007/978-3-030-35252-3_2)
- [17] Ahmad, N., Jabeen, N. & **Raza, K.** (2020). **Machine Learning Based Outlook for the Analysis of SNP-SNP Interaction for Biomedical Big Data.** *Lecture Notes in Electrical Engineering*, Springer, 601: 1-10. [https://doi.org/10.1007/978-981-15-1420-3\\_2](https://doi.org/10.1007/978-981-15-1420-3_2)
- [16] Qazi, S. & **Raza, K.** (2020). **Smart Biosensors for an efficient Point of Care (PoC) Health Management.** *Smart Biosensors in Medical Care*, Elsevier, 1-20. <https://doi.org/10.1016/B978-0-12-820781-9.00004-8>
- [15] Jabeen, A., Ahmad, N. & **Raza, K.** (2019). **Differential Expression Analysis of ZIKV Infected Human RNA Sequence Reveals Potential Genetic Biomarkers.** *Lecture Notes in Bioinformatics*, Springer, 11465: 1-12. [https://doi.org/10.1007/978-3-030-17938-0\\_26](https://doi.org/10.1007/978-3-030-17938-0_26)



- [14] **Raza, K.** & Qazi, S. (2019). **Nanopore Sequencing Technology and Internet of Living Things: A Big Hope for U-Healthcare.** *Sensors for Health Monitoring*, Elsevier, 5: 95-116. <https://doi.org/10.1016/B978-0-12-819361-7.00005-1>
- [13] Farooqi, M.R., Iqbal, N., Singh, N.K., Affan, M. & **Raza, K.** (2019). **Wireless Sensor Networks towards convenient infrastructure in Health care industry: A systematic study.** *Sensors for Health Monitoring*, Elsevier, 5: 31-46. <https://doi.org/10.1016/B978-0-12-819361-7.00002-6>
- [12] Qazi, S., Tanveer, K., El-bahnasy, K. & **Raza, K.** (2019). **From Telediagnosis to Teletreatment: The Role of Computational Biology and Bioinformatics in Tele-based Healthcare.** *Telemedicine Technologies*, Elsevier, 153-169. <https://doi.org/10.1016/B978-0-12-816948-3.00010-6>
- [11] Wani, N. & **Raza, K.** (2019). **Raw Sequence to Target Gene Prediction: An Integrated Inference Pipeline for ChIP-seq and RNA-seq Datasets.** In: Malik H., Srivastava S., Sood Y., Ahmad A. (eds) *Applications of Artificial Intelligence Techniques in Engineering. Advances in Intelligent Systems and Computing*, Springer, 697: 557-568. [https://doi.org/10.1007/978-981-13-1822-1\\_52](https://doi.org/10.1007/978-981-13-1822-1_52)
- [10] Gupta, T.K. & **Raza, K.** (2019). **Optimization of ANN Architecture: A Review on Nature-Inspired Techniques.** In *Machine Learning in Bio-Signal Analysis and Diagnostic Imaging*, Elsevier, 159-182. <https://doi.org/10.1016/B978-0-12-816086-2.00007-2>
- [9] **Raza, K.** (2019). **Improving the Prediction Accuracy of Heart Disease with Ensemble Learning and Majority Voting Rule.** In *Advances in Ubiquitous Sensing Applications for Healthcare, U-Healthcare Monitoring Systems: Design and Applications*, Academic Press, Elsevier, 179-196. <https://doi.org/10.1016/B978-0-12-815370-3.00008-6>
- [8] Jabeen, A., Ahmad, N. & **Raza, K.** (2018). **Machine Learning-based State-of-the-art Methods for the Classification of RNA-Seq Data.** In: Dey N., Ashour A., Borra S. (eds). *Classification in BioApps. Lecture Notes in Computational Vision and Biomechanics*, Springer, 26: 133-172. [https://doi.org/10.1007/978-3-319-65981-7\\_6](https://doi.org/10.1007/978-3-319-65981-7_6)
- [7] Wani, N. & **Raza, K.** (2018). **Multiple Kernel Learning Approach for Medical Image Analysis.** In: Dey N, Ashour A, Shi F, Balas E (eds), *Soft Computing Based Medical Image Analysis*, Elsevier, 31-47. <https://doi.org/10.1016/B978-0-12-813087-2.00002-6>
- [6] **Raza, K.** (2017). **Protein Features Identification for Machine Learning-based Prediction of Protein-Protein Interactions.** In *Proc. of Communications in Computer and Information Science*, Springer, 750: 305-317. [https://dx.doi.org/10.1007/978-981-10-6544-6\\_28](https://dx.doi.org/10.1007/978-981-10-6544-6_28)
- [5] **Raza, K.** (2016). **Analysis of Microarray Data Using Artificial Intelligence Based Techniques.** *Handbook of Research on Computational Intelligence Applications in Bioinformatics*, IGI Global, 216-239. <http://doi.org/10.4018/978-1-5225-0427-6.ch011>
- [4] **Raza, K.** (2015). **M5 Model Tree and Gene Expression Programming for the Prediction of Metrological Parameters.** In *Proc. of 2015 International Conference on Computers, Communications, and Systems (ICCCS-2015)*, 47-51, IEEE. <http://dx.doi.org/10.1109/CCOMS.2015.7562850>
- [3] **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*, 1242-1246, IEEE.
- [2] **Raza, K.** & Parveen, R. (2013). **Soft Computing Approach for Modeling Genetic Regulatory Networks.** *Advances in Intelligent Systems and Computing*, Springer, 178: 1-11. [http://doi.org/10.1007/978-3-642-31600-5\\_1](http://doi.org/10.1007/978-3-642-31600-5_1)
- [1] **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 2013*, p. 461-466. <http://doi.org/10.1049/cp.2013.2357>

#### **Journal Publication (Non-Scopus/Non-WoS Indexed) (8)**

- [8] **Raza, K.** (2016). **Applied Computing and its Scope.** *Journal of Applied Computing*, 1(1): 1.
- [7] Jabeen, A., Imam, N., Ahmad, N. & **Raza, K.** (2016). **Next Generation Sequencing: A New Platform for Disease Study.** *JMI International Journal of Mathematical Sciences*, 7, 50-61.

- [6] **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.
- [5] Hasan, H., & **Raza, K.** (2012). **Clustering Approach to Unveiling Relationships between Gene Regulatory Networks.** *International Journal of Computer Sciences*, 6(5), 1307-1310.
- [4] **Raza, K.** & Parveen, R. (2012). **Evolutionary algorithms in genetic regulatory networks model.** *Journal of Advanced Bioinformatics Applications and Research*, 3(1), 271-280.
- [3] **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), 206-211.
- [2] **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(1): 3-16.
- [1] **Raza, K.** (2010). **Application of data mining in bioinformatics.** *Indian Journal of Computer Science and Engineering*, 1(2): 114-118.

### Posters (7)

- [7] Ahmad, S., & **Raza, K.** (2022). **Multitargeted docking-based simulative understanding of Theodrenaline against lung cancer: an in-silico study.** *21st International Conference on Bioinformatics (InCoB)*, 21-23 November 2022. **(Best Poster Presentation Award)**
- [6] Bhat, A.M., & **Raza, K.** (2022). **Identification of potential diagnostic biomarkers of Gastric Cancer from RNA-seq analysis.** *3rd ICGA Conference - Biobanking to Omics: Collecting the Global Experience*, 13-14 Jan 2022. [https://i0.wp.com/icga-conference.ctcr.in/wp-content/uploads/2022/01/Adil\\_Bhat\\_track2.png](https://i0.wp.com/icga-conference.ctcr.in/wp-content/uploads/2022/01/Adil_Bhat_track2.png)
- [5] Sahu, A., **Raza, K.**, Ahmad, S. & Verma, S. (2019). **In Silico Study of Aromatase Inhibitors Using Computer-Aided Drug Design against Breast Cancer.** *World Congress on Reproductive Health with Emphasis on Reproductive Cancers, Infertility and Assisted Reproduction*, Shri Mata Vaishno Devi University, Jammu and Kashmir, India, 14-16 Feb, 2020. <http://doi.org/10.13140/RG.2.2.33559.73128>
- [4] Rai, A., Sahu, A., Varma, S., **Raza, K.**, Parveen, S., Ali, S. (2019). **Molecular docking, protein ligands interaction and ADMET analysis of arecoline with TGF-Beta receptors for the treatment of OSMF.** *Interdisciplinary Science Conference on Big Data and Computational Biology*, CIRBSc, Jamia Millia Islamia, 21-22 Oct, 2019.
- [3] Qazi, S. & **Raza, K.** (2019). **Prostate, Ovary, Testis, Embryo Expression (POTE) Family: Evolutionary, Structural and Functional Analysis.** *Interdisciplinary Science Conference on Big Data and Computational Biology*, CIRBSc, Jamia Millia Islamia, 21-22 Oct, 2019.
- [2] Faiza M., Tanveer K., Fatihi S., & **Raza, K.** (2017). **Comprehensive assessment of miRNA target prediction tools in human and drosophila melanogaster.** *National Conference on Breaking Barriers through Bioinformatics & Computational Biology*, Supercomputing Facility for Bioinformatics & Computational Biology, IIT Delhi, July 31- Aug 01, 2017.
- [1] Sanjay & **Raza, K.** (2017). **Plants can communicate through surface receptors.** *DBT-BIF Sponsored National Workshop on Translational Bioinformatics*, 15-16 Feb 2017 at Jamia Millia Islamia.

### FUNDED RESEARCH PROJECTS (03)

- Title: **"Target identification and efficacy enhancement of proven MDR overcoming Piper spp derived compounds towards candidate drug development against WHO priority 1 (critical) MDR pathogens: P. aeruginosa, E. coli, K. pneumoniae, and M. tuberculosis"**  
 Role: **Principal Investigator**, Duration: 3 Years (2023-2026)  
 Funding Agency: **BRICS STI FP (Brazil: R\$ 160,930; Russia: P 21,000,000 & South Africa: ZAR 3,000,000)**  
 Status: **Ongoing**
- 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 PhD Candidate	Thesis Title	Status
1.	Nisar Iqbal Wani	Connecting Transcriptional Regulatory Networks with miRNA Regulatory Modules: An Integrative Analysis of Gene Regulatory Networks	Awarded (2020)
2.	Sahar Qazi	<i>In silico</i> Study of POTE and Analogous Activity of Oncologic Medicaments in Ovarian Cancer	Awarded (2022)
3.	Tarun Kumar Gupta	Optimization of ANN Architecture using Nature-Inspired Techniques	Awarded (2023)
4.	Abdul Manazir (Registered under Visvesvaraya PhD Scheme, DeitY, GOI)	Multi-Output Hybrid Genetic Programming Model for Efficient Prediction of Time Series Data	Awarded (2023)
5.	Almas Jabeen (Co-supervising with Dr. N. Ahmad, Deptt. of Biosciences, JMI)	Statistical Analysis of RNA-seq Data for Disease Signature Identification and Drug Discovery	Awarded (2023)
6.	Nripendra Kumar Singh	Medical Image Segmentation and Classification using Deep Learning	Ongoing
7.	Shaban Ahmad	AI-based Predictive Modelling and Molecular Enumeration against Lung Cancer	Ongoing

## CONTRIBUTIONS TO MOOC/Swayam/eGyanKosh PLATFORM

S.No.	Module Title	Course Title	Link
1.	Concept and Educational Uses of Sharing Images	ICT in Teacher Education	<a href="https://www.youtube.com/watch?v=lagbyOVvmKw">https://www.youtube.com/watch?v=lagbyOVvmKw</a>
2.	Introduction to Bioinformatics	B.Sc. Biochemistry, IGNOU, New Delhi	<a href="https://egyankosh.ac.in/handle/123456789/81963">https://egyankosh.ac.in/handle/123456789/81963</a>

## INVITED TALK/SEMINAR / PRESENTATION DELIVERED

- [29] Delivered an invited online talk on "**Artificial Intelligence in Unani System of Medicines: Core Concepts, Clinical Applications & Perspectives**" in CCRUM, Ministry of AYUSH. Oct 18, 2022.
- [28] Delivered an invited online talk on "**Applications of Data Science in Bioinformatics**" in AICTE-ATAL sponsored one week FDP on "Data Science" organized by Department of Computer Science & IT, MANUU, Hyderabad during 22-26 Nov, 2021.
- [27] Delivered an invited online talk on "**Computational and Big Data Challenges in Bioinformatics Research**", in "3<sup>rd</sup> Two Week online Refresher Course in Computational and Mathematical Sciences", UGC-Human Resource Development Centre, Jamia Millia Islamia during Oct 22 to Nov 5, 2021.
- [26] Presented a paper entitled "**GRNIP: A Java Package for Inferring Gene Regulatory Networks from Gene Expression Profiles**" in [International Applied Bioinformatics Conference 2021](#) (IABC-21), Istanbul, Turkey during June 23-24, 2021.
- [25] Delivered an invited online talk on "**Computational and Big Data Challenges in Bioinformatics Research**", in "Two-Days National Conference on Computational Methods, Data Science and Applications", Department of Computer Science & IT, MANUU, Hyderabad during May 24-25, 2021.
- [24] Delivered an invited online talk on "**Soft Computing and Its Applications**", in a Webinar organized by A.M. College, Gaya (Bihar) on May 23, 2021.
- [23] Delivered an invited online talk on "**How to Use Free/Open Source Software/Hardware in Education?**", in "3<sup>rd</sup> Online Faculty Induction Programme", UGC-Human Research Development Centre, Jamia Millia Islamia, New Delhi during December 28, 2020 to February 2, 2021.

- [22] Delivered an invited online talk on **“Computational and Big Data Challenges in Bioinformatics Research”**, in **“ATAL Online Faculty Development Programme on Data Sciences”**, Department of Computer Science, Aligarh Muslim University, Aligarh during October 26–31, 2020.
- [21] Delivered an invited online lecture on **“An Overview of Computational Systems Biology”**, in Summer School **“Bioescalator: Insights into Biotechnology, Plant Science and Bioinformatics**, IILM University, Greater Noida during May 11 – June 4, 2020.
- [20] Delivered an invited lecture on **“Role of Big Data, IoT and Machine Learning in Cyber Security”**, in National Conference on Recent Trends in Cyber Security, Pt. Ravishankar Shukla University, Raipur during February 5-7, 2020.
- [19] Presented a paper entitled **“Machine Learning Based Outlook for the Analysis of SNP-SNP Interaction for Biomedical Big Data”** in International Conference on Data Science, Machine Learning & Applications (ICDSMLA 2019), Hyderabad during March 29-30, 2019.
- [18] Delivered an invited lecture on **“Analysis of RNA-seq Data from Next-Generation Sequencing: Promises & Challenges”** in [7<sup>th</sup> International GastroIntestinal, Liver & Uro-Oncology Conference](#), Cairo, Egypt during May 10-15, 2018.
- [17] Delivered an invited lecture on **“Computational Analysis of RNA-seq Data: Opportunities & Challenges”** in [7<sup>th</sup> Annual International Ain Shams University Conference: Internationalization and Mobility](#), Cairo, Egypt during April 2-5, 2018.
- [16] Presented a paper **“Protein features identification for machine learning-based prediction of protein-protein interactions”** in International Conference on Information, Communication and Computing Technology (ICICCT-2017), New Delhi, on May 13, 2017.
- [15] Presented a paper **“Prediction of cardiovascular disease using ensemble learning”** in International Conference on Mathematics & Computer Science–2017 (ICMSC-2017), Bangalore, during February 16–18, 2017.
- [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 29<sup>th</sup> 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 4<sup>th</sup> 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 2<sup>nd</sup> 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 11<sup>th</sup> May, 2011 for the partial fulfilment of Pre-Ph.D. course work.

## **SEMINARS / CONFERENCES / WORKSHOPS ATTENDED**

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- [26] **International Webinar Series** organized by **MIR Lab (USA)** [Jul 20 to Aug 14, 2020]
- [25] **2<sup>nd</sup> 2-Weeks Refresher Course in Computational & Mathematical Sciences** at UGC-HRD Center, Jamia Millia Islamia, New Delhi [Feb 7-20, 2020]
- [24] **One-Week FDP on Data Science and Big Data Analytics** organized by ICT Academy at DAV Centenary College, Faridabad [Feb 12-16, 2019]
- [23] **1<sup>st</sup> 3-Weeks Refresher Course in Climate Change (Interdisciplinary)** at UGC-HRD Center, Jamia Millia Islamia, New Delhi [Feb 20 to Mar 14, 2017]
- [22] Attended one-day ‘**International Seminar on Cloud Computing and Distributed Systems**’ organized by Department of Computer Science, Jamia Millia Islamia, New Delhi, [December 30, 2016]
- [21] One-day ‘**National Seminar on Recent Trends in Computer Science**’ organized by Department of Computer Science, Jamia Millia Islamia, New Delhi, [March 30, 2016]
- [20] 3-days ‘**National Instructional Workshop on Cryptology**’ organized by Department of Computer Science, Central University of Rajasthan, [April 6-8, 2016]
- [19] 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] 110<sup>th</sup> **4-Weeks Orientation Programme** at Academic Staff College, Jamia Millia Islamia, New Delhi [Nov 11 to Dec 8, 2014]
- [17] 4<sup>th</sup> **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-INSANA-SASI) 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**”, CIT, Jamia Millia Islamia [21<sup>st</sup> 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", Centre for Information Technology, Jamia Millia Islamia, New Delhi [Feb 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", Centre for Information Technology, Jamia Millia Islamia, New Delhi [Oct 31 - Nov. 1, 2007]

## RESEARCH COLLABORATORS

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- [Khaled ElBahnasy](#), Faculty of Computer and Information Science, Ain Shams University, Egypt.
- [Debmalya Barh](#), Universidade Federal de Minas Gerais (UFMG), Brazil.
- [Dhruv Kumar Nishad](#), INMAS, DRDO, New Delhi.
- [Ashok Sharma](#), All India Institute of Medical Sciences (AIIMS), New Delhi
- [Gautam Sharma](#), All India Institute of Medical Sciences (AIIMS), New Delhi
- [Surender Singh](#), All India Institute of Medical Sciences (AIIMS), New Delhi
- [M.I. Siddiqi](#), CSIR-Central Drug Research Institute, Lucknow
- [Meryam Sardar](#), Deptt. Of Biosciences, Jamia Millia Islamia, New Delhi
- [Arpita Raj](#), Ranchi Institute of Medical Sciences (RIMS), Ranchi, India.
- [Saurabh Verma](#), ICMR-National Institute of Pathology, New Delhi
- [Hemant Gautam](#), ICMR-National Institute of Pathology, New Delhi

## RESEARCH FELLOWSHIPS / HONOURS

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- **Session Chair:** Chaired a technical session in 2022 IEEE World Conference on Applied Intelligence and Computing (AIC 2022), June 17-19, 2022.
- **Session Chair:** Chaired a technical session in National Conference on Recent Trends in Cyber Security, Pt. Ravishankar Shukla University, Raipur during February 5-7, 2020.
- **Session Chair:** Chaired a technical session in Interdisciplinary Science Conference: Big Data and Computational Biology held at CIRBSc, Jamia Millia Islamia during October 21-22, 2019.
- **Session Chair:** Chaired a technical session in IEEE sponsored conference Confluence-2019 held at Amity University, U.P. during March 10-11, 2019.
- **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 2<sup>nd</sup> International Conference on Artificial Intelligence, Soft Computing and Applications, Chennai during July 13-15, 2012.
- Received **Indian Academy of Sciences (IASc-INSNA-NASI) Summer Research Fellowship** for two months and worked at IIT Bombay during May 01 – June 30, 2012.

## MEMBERSHIP OF PROFESSIONAL BODIES / COMMITTEES/EDITORIAL BOARD

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- **Academic Editor,** [Peerj Computer Science](#)
- **Guest Editor,** [Natural Product Communications](#).
- **Member of Editorial Board,** Artificial Intelligence in Cancer, USA.
- **Life Member,** Computer Society of India (CSI) (Member ID: 01060359)
- **Life Member,** Soft Computing Research Society (SCRC).
- **Member,** Association for Computing Machinery (ACM), USA (Member ID: 8121039)
- **Conference Review Committees / PCM/TPC –** WeST-2013, AIAA-2013, ACITY-2013, [AISC-2014](#), [ICCSB-2014](#), [ICSC-2015](#), [ICIUS 2015](#), [AIAA-2015](#), [GTIE-2016](#), [ICGCET-2016](#), [INDIACom-2017](#), [ICICCT-2017](#), [ICICCT-2018](#), [ICICCT-2019](#), [ICETIT-2019](#), ICICCT-2020, [AISE-2020](#), [AIS2C2-2022](#), [ICAAAIML-2022](#), [ICICCT-2023](#), [ICDT-2023](#), [IWBBIO-2013](#).

## SCIENTIFIC RESEARCH PROJECT REVIEWER

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- The Agence Nationale de la Recherche (ANR), France.
- Science and Engineering Research Board (SERB), India.

## EDITOR/EDITORIAL BOARD MEMBER

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- Academic Editor, [PeerJ Computer Science](#).
- Guest Editor, [Natural Product Communication](#), SAGE.
- Editor-in-Chief, [Journal of Applied Computing](#).
- Assistant Editor, [Arid-zone Journal of Basic & Applied Research](#).

## INVITED REVIEWER ([PUBLONS](#))

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- ACM/IEEE Transactions on Computational Biology & Bioinformatics, [IEEE](#)
- Applied Soft Computing, [Elsevier](#)
- Bioinformatics, [Oxford University Press](#)
- BMC Bioinformatics
- Briefings in Bioinformatics, [Oxford University Press](#)
- Computational Biology and Chemistry, [Elsevier](#)
- Current Bioinformatics, [Bentham Science Publishers](#)
- Database, [Oxford University Press](#)
- Expert Systems, [Wiley](#)
- Heredity, [Nature](#)
- IEEE Access, [IEEE](#)
- IEEE Transactions on Fuzzy Systems, [IEEE](#)
- IET Systems Biology, [IET](#)
- Informatica
- Int. J. of Business Intelligence and Data Mining, [Inderscience](#)
- Intelligent Automation & Soft Computing, [Taylor & Francis](#)
- International Journal of Bioinformatics Research and Applications, [Inderscience](#)
- Journal of Algorithms and Computational Technology, SAGE.
- Natural Product Communication, [Sage Publications](#)
- Neural Computing and Applications, [Springer](#)
- Neural Processing Letters, [Springer](#)
- Nucleic Acid Research, [Oxford University Press](#)
- Pakistan Journal of Biotechnology
- PeerJ Computer Science
- SpringerPlus, [Springer](#)

## COURSES TAUGHT

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- Advance Java /Internet Technologies (J2EE)
- Algorithm Fundamentals
- Artificial Intelligence
- Bioinformatics Fundamentals
- Core Java / J2SE
- Web-based Programming
- Next-Generation Sequencing Data Analysis
- Object-oriented Programming
- Operating Systems
- Programming & Problem Solving
- Structural Bioinformatics
- Systems Biology

## OTHER ACADEMIC/ADMINISTRATIVE RESONSIBILITIES

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- **Elected Member of Academic Council, Jamia Millia Islamia**, [2022-2025].
- **Mess Warden (Hostel)**, Hall of Boys' Residence–Campus 'B', Jamia Millia Islamia [Jul'2022-till date].
- **Convener (Curriculum Committee)**, Department of Computer Science, Jamia Millia Islamia [Jan, 2023].
- **IQAC Co-Coordinator**, Department of Computer Science, Jamia Millia Islamia [Jan, 2023].
- **Coordinator**, Departmental Library, Jamia Millia Islamia [Jul, 2022 – till date].
- **UG Course Coordinator**, Department of Computer Science, Jamia Millia Islamia [Jul, 2022 – till date].
- **Co-coordinator**, Bioinformatics Infrastructure Facility (BIF), Department of Biotechnology (DBT), Govt. of India [May'2019 – Mar'2020]
- **Programme Co-ordinator**, MSc (Bioinformatics) Programme, Jamia Millia Islamia [May'2019 – June'2020]
- **Convener**, Board of Studies/Department Faculty Committee, Department of Computer Science, JMI [May'2019 – June'2019].
- **Member**, Technical Committee for Purchasing/Upgrading University Firewall & Internet Security, Jamia Millia Islamia [2019]
- **Observer & Key Handler**, Jamia Millia Islamia School Entrance Exam, 2019.
- **Mess Warden (Hostel)**, Hall of Boys' Residence–Campus 'B', Jamia Millia Islamia [Jul'2018-Jul'2019].
- **Warden (Hostel)**, Hall of Boys' Residence – Campus 'B', Jamia Millia Islamia [Jul'2016-Jun'2017].
- **Coordinator, Departmental Library**, Department of Computer Science, JMI [Jul'2014-Sep'2017].
- **Convener**, Board of Studies/Department Faculty Committee, Department of Computer Science, JMI [May'2015-Sep'2017].
- **Coordinator**, Department Curriculum Committee [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 [2011-2013]
- **Member**, Departmental Lab/Purchase Committee [2012-2013]
- **Member**, Departmental Examination Committee [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 6<sup>th</sup> 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.

## ACADEMIC PROJECTS GUIDED

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- Project guided at Post-Graduate level of various university like JMI, Jamia Hamdard, IGNOU, Amity University, Ain Shams University (Cairo) = 100+, selected dissertation titles are available at [www.kraza](http://www.kraza)



## PRACTICAL EXPERTISE

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<b>Operating System</b>	LINUX, MS-Windows , Android
<b>Web Development Tools</b>	J2EE (Servlet, JSP, EJB, JMS, CORBA), Struts, PHP, AJAX, Dreamweaver, Eclipse, etc.
<b>Web Servers/Containers</b>	Apache Tomcat, JBoss, WAMP/XAMP
<b>Databases</b>	Oracle, SQL Server, MySQL
<b>Programming Languages</b>	C, C++, J2SE, J2EE
<b>Graphics &amp; Animation Tools</b>	Photoshop, CorelDraw, Inkscape, Macromedia MX Flash
<b>Mathematical/Data Mining/ Machine Learning Tools</b>	R, Matlab, Weka, RapidMiner, Neuro Solutions, GPDotNet, GeneXProTools, SPSS, etc.,
<b>Bioinformatics Tools</b>	BLAST, EMBOSS, Clustal Omega, MEGA, Phylip, GNA, Cytoscape, Pymol, Galaxy, CellDesigner, GEO2R, Gene Ontology based Enrichment Analyzer, NGS Tools: SRA Toolkit, Bowtie2, Cufflink, edgeR, GATK, etc.

## PERSONAL DETAILS

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Father's Name	Late Abdul Jabbar Quais
Mother's Name	Late Zulekha Khatoon
Marital Status	Married
Nationality/Sex	Indian/Male
Languages Known	English, Hindi, Urdu and basic Arabic

## REFEREES

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- **Prof. Khurram Mustafa**  
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Tel. +91-11-26981717 Extn. 3450 | Email: [kmfarooqi \[at\] yahoo.com](mailto:kmfarooqi@yahoo.com)
- **Prof. Khaled ElBahasy**  
Professor & Vice Dean, Faculty of Computer & Information Sciences, Ain Shams University, Cairo, Egypt  
Email: [khaled.bahnasy \[at\] cis.asu.edu.eg](mailto:khaled.bahnasy@cis.asu.edu.eg)

Updated on May 05, 2023