Yusera Farooq Khan

yusrakhan.27aug@gmail.com, 18dcs006@smvdu.ac.in
+91 7006948348
ORCID ID: 0000-0002-3842-8251



Education

Ph. D. (CSE)	2023, Shri Mata Vaishno Devi, University, India
M. Tech. (CSE)	2014, National Institute of Engg. and Technology, NIMS University, India
B.Tech (CSE)	2012, Baba Ghulam Shah Badasha University, India
GATE Qualified	2013, GATE in Computer Science and Information Technology

Work Experience

Assistant Professor October 2025- 20th June, 2026 Division of Agriculture Engineering, Sher-e-Kashmir University of Agriculture Science and Technology, Jammu, JK, India

Assistant Professor November 2024–April 2025, School of Engineer ing and Technology Cluster University, Jammu, India

Research Associate Feb 2023-Aug 2024, High-End Computing AI and Deep Learning lab, School of CSE, Shri Mata Vaishno Devi University, Katra, India

Assistant Professor August 2014–August 2018, School of CSE, Baba Ghulam Shah Badsha University, Rajouri, India

Professional Activities

1. Organized an FDP on **"AI, Machine Learning, and Data Science,"** held on January 15–19, 2024, under RP-126 (High-End Computing AI and Deep Learning Lab), SoCSE, SMVD University, Katra, jk.
2. Organized two days Fifth International Conference on **"Computing, Communications, and Cyber-Security (IC4S'05)"** under RP-126 " High End Computing AI nad Deep Learning Lab" on 29 Feb and 1st March 2024 , at SoCSE, SMVD University, Katra, jk.
3. Delivered an expert talk on **"Deep Learning Methods for Neurological Disorders Using Neuroimaging"** at the International Workshop on Smart Healthcare, Innopolis AI Conference for Business (AI IN 2023), Innopolis University, Russia. https://aiconf.innopolis.ru
4. **Patent Published:** Dr. Baijnath Kaushik, Shashwat Sharma, Pushpesh Gokul, Rhythm, Abhigya Mahajan, Dr. Yusera Farooq Khan, Dr. Malvika Ashok, Dr. Akshma Chadha
Title of Invention: "System and method for efficient prediction of evaporation using ensemble feature selection techniques"
5. Delivered an expert Lecture on **"Drones and Data Intelligence"** at Four days workshop on "Agritech AI: Tools, Trends and Techniques for Smart Agricultural Practices" held on 17- 20 Nov, 2025 at SKUAST Jammu, jk, India.

Achievements/Awards

September, 2020: Best Paper award for "Neuro-image classification using machine learning algorithm for the classification and prediction of Alzheimer's disease" at the International Conference on "Machine Intelligence and Data Science Applications (MIDAS-2020)" in association with Next Generation Computing Technology (NGCT) Society.

Nov, 2019: Certificate of Appreciation for contribution to the conduction of a workshop on "foundation of fuzzy set and fuzzy logic", held at SMVD University, Katra

April 2018: Award of appreciation for Organizing member of the National Conference (NCRACIT) in Computers and Information Technology, held at BGSBU, Rajouri

March 29-April 7,2018: Certificate of appreciation for representing the BGSB University. in the 2nd State Universities Championship Tournament, held at the University of Jammu as women's team manager

April 3-9,2017: Certificate of appreciation for representing the BGSB University. in the Ist State Universities Championship 2017 Tournament, held at the University of Jammu as women's team manager

Aug 26-27,2017: Award of appreciation for Organizing member of National Conference (ETIECE) in electronics and communications, held at BGSBU, Rajouri

March 2013: Qualified GATE in Computer Science and Information Technology

Month, 2010: Award from Chancellor for the winner in Cross-country women and Runner-up in Trekking Women Annual Championship, held at BGSBU, Rajouri

Month, 2009: Award From Chancellor for the winner in Trekking Women and Cross-country Women Annual Championship, held at BGSBU, Rajouri

Projects/Training Programs

Aug 26–Oct 21, 2009	C-PROGRAMMING *(3rd Sem Programming Assignment)* **APTECH, Jammu**
March–June 2011	FACULTY MANAGEMENT SYSTEM *(4th Sem Project)* **BGSB University**
June 27–28, 2011	Four Weeks Training on LAMP (Linux, Apache, MySQL, PHP) *at CAPS* **Srinagar, Kashmir**
March–May 2012	CYBER SECURITY SUITE *(B.Tech Final Year Project)* **BGSB University**
Feb–June 2012	Six Month Training on .NET Technologies, *Ideogram Solutions (P) Ltd* **Jammu**
Jan–Aug 2014	"Extension of Alert Protocol for the Mitigation of Salander Attack" *(M.Tech Thesis)* **NIMS University**
July 25–26, 2018	Dell EMC–NVIDIA Training *on Artificial Intelligence / Deep Learning* **SMVD University**
Nov 1, 2019	Certificate of Competency in *Fundamentals of Deep Learning* **NVIDIA Deep Learning Institute**

Area Of Research /Courses Joined

Research Area	Machine/Deep Learning, Medical Image Analysis, Computer Vision and Natural Language Processing
NPTEL	Python for Data Science
Data Camp	Python in Medical Image Analysis
Udemy	Machine learning and Deep learning
NVIDIA	Fundamentals of Deep Learning in Computer Vision

Publications

1 Banerjee, T., Khan, Y. F., Rafiq, T., Singh, S., Wason, R. & Narula, G. S. (2025). HHO-UNet-IAA: harris hawks optimization based novel unet-inception attention architecture for glaucoma segmentation. *International Journal of Information Technology*, 1–10.

2 Kaushik, B., Mahajan, A., Chadha, A., Khan, Y. F. & Sharma, S. (2025). A fine-tuned adaptive weight deep dense meta stacked transfer learning model for effective cervical cancer prediction. *Physica Scripta*, *100*(3), 036002.

3 Kaushik, B., Sharma, R., Khan, Y. F., Chadha, A. & Niharika. (2025). A novel computational intelligence model using improvised feature selection for parkinson's disease classification. *Multimedia Tools and Applications*, 1–20.

4 Khan, Y. F., Runani, A. & Ahmed Mir, B. (2025). Swarm-driven fine-tuned hybrid transfer learningarchitecture on breast ultrasound scans for advanced prognostic. *International Journal of Information Technology*, *17*(2), 1031–1038.

5 A novel dual feature extraction using fine-tuned ResNet with GWO and deep dense neural network for multiple lung disease classification. (2023). *IEEE Access*, [Under Review].

6 Novel DFE-HXV: Dual feature extraction using hybridized xception and vgg network for the prognosis of alzheimer's dementia. (2023). *IEEE Access*, [Communicated].

7 Singh, D. P., Kaushik, B., Khan, Y. F., Chadha, A., Mahajan, A., Jandwani, A. & Narula, G. S. (2023). Emerging trends of artificial intelligence in detecting neurodegeneration. In *International conference on cognitive computing and cyber physical systems* (pp. 591–601). Springer.

8 Khan, Y. F., Kaushik, B., Chowdhary, C. L. & Srivastava, G. (2022). Ensemble model for diagnostic classification of Alzheimer's disease based on brain anatomical magnetic resonance imaging. *Diagnostics*, (12(12)), 3193.

9 Khan, Y. F., Kaushik, B. & Mir, B. A. (2022). Computational intelligent models for alzheimer's prediction using audio transcript data. *Computing and Informatics*, *41*(6), 1589–1624.

10 Khan, Y. F., Kaushik, B., Mir, B. A., Verma, R. & Khandelwal, H. (2022). Transfer learning-assisted prognosis of alzheimer's disease and mild cognitive impairment using structural-MRI. In *2022 10th international conference on emerging trends in engineering and technology-signal and information processing (icetet-sip-22)* (pp. 1–6). IEEE.

11 Khan, Y. F., Kaushik, B., Rahmani, M. K. I. & Ahmed, M. E. (2022a). HSI-LFS-BERT: Novel hybrid swarm intelligence based linguistics feature selection and computational intelligent model for alzheimer's prediction using audio transcript. *IEEE Access*.

12 Khan, Y. F., Kaushik, B., Rahmani, M. K. I. & Ahmed, M. E. (2022b). Stacked deep dense neural network model to predict alzheimer's dementia using audio transcript data. *IEEE Access*, *10*, 32750–32765. doi:10.1109/ACCESS.2022.3161749

13 Khan, Y. F. & kaushik, B. (2021). Neuroimaging (anatomical MRI) based classification of alzheimer's disease and mild cognitive impairment using convolution neural networ. *International Conference on Advances In Data Computing, Communication and Security (I3CS), Sept. 8-10, 2021*.

14 Khan, Y. F. & Kaushik, B. (2020). Computer vision techniques for neuro-image analysis in neurodegenerative diseases: A survey. In *2020 international conference on emerging smart computing and informatics (esci)* (pp. 346–350). IEEE.

15 Khan, Y. & kaushik, B. (2020). Neuro-image classification using machine learning algorithm for the classification and prediction of alzheimer's disease. In *International conference on machine learning and data science applications (midas-2020)* (pp. 1–8). Springer.

16 Abdul Q, S. M., and Yusera K. (2018). Vanets applications, challenges and possible attacks: A survey. *International Journal of Advanced Research in Computer and Communication Engineering*, *6*(7), 2278–1021.

17 Gupta, N., Kaushik, B., Chadha, A., Frooq Khan, Y. & Sharma, S. (2018). An ensemble approach for multiclass skin lesion classification from dermoscopic images. In *International conference on emerging trends in communication, computing and electronics* (pp. 267–277). Springer.

18 Nasir, Y. F. K. (2018). Solar-wind hybrid generation system using single axis solar tracker. *Asian Journal of Electrical Science*, *7*(2), 2249–6297.

19 Rukhsana Thaker, S. N. M., Yusera farooq Khan. (2018). Fog approach in internet of things: A review. *National Conference on Recent Advances in Computer Science and Information Technology (NCRACIT), BGSB University*(Rajouri).

20 Yusera. (2018). Cisco secured virtual private networks: A review. *Asian Journal of Computer Science and Technology*, *7*(2), 2249–0701.

21 Yusera F K, Q. A. (2018). Smart water management using real time data and ict: A solution for water management challenges. *International Journals of Advanced Research in Computer Science and Software Engineering*, *8*(10), 2277–128X.

22 Mudasser N, S. M., Yusera F K. (2017). A survey of collaborative filtering-based recommender systems. *South -asian journal of multidisciplinary studies*, *4*, 2349–7858.

23 Prerna C, V. A. & Nidhi S, Y. F. K. (2017). New approach for file search using multi-keyword and graphical otp. *International Journal for Scientific Research and Development*, *1*(3), 2321–0613.

24 Prerna C, V. A. & Nidhi S, Y. k. (2017). Concept of keyword search: A review. *International Journal For Technological Research In Engineering*, *4*(9), 2347–4718.

25 KhanYusera. (2016). A survey of collaborative filtering based recommendation. *National Seminar on Emerging trends in data sciences and artificial intelligence*, *BGSBU*, Rajouri.

26 Yusera FK, A. A. (2014). Extension of alert protocol for the mitigation of salander attack. *International Journal publication in Academic Education and Research*, 2349–4999.

Book Chapters

1. **Khan, Yusera Farooq**, Baijnath Kaushik, and Deepika Koundal. "Machine Learning Models for Alzheimer's Disease Detection Using Medical Images." In Data Analysis for Neurodegenerative Disorders, pp. 165-182. Singapore: Springer Nature Singapore, 2023.
2. Mir, Bilal Ahmed, Sicheng Liu, Zhen Li, Shugufta Abrahim Wani, Tanveer A. Mir, **Yusera Farooq Khan**, Shadil Ibrahim Wani, Masayoshi Fukushima, and Takuto Yamaguchi. "The rise of blockchain technology in healthcare for the preservation of patient-centric health records." In Blockchain for Industry 4.0, pp. 1-21. CRC Press, 2022.
3. **Yusera Farooq Khan,**, and Bilal Mir. "The metaverse beyond the hype: Interdisciplinary perspectives on applications, tools, techniques, opportunities, and challenges of the metaverse." Exploring the Metaverse, Elsevier (2025): 213-223.

Curricular Activities

Conferences attended

1. IEEE International Conference on Emerging Trends in Engineering Technology (ICETET SIP-22), Electronics Engineering at G H Raisoni College of Engineering, Nagpur, 29-30 April 2022.
2. International Conference on Advances in Data Computing, Communication and Security (I3cs-2021), National Institute of Technology, Kurukshetra, 08-09 Sep 2021, India.
3. International Conference on Machine Intelligence and Data Science Applications (MIDAS-2020) in association with Next Generation Computing Technology (NGCT) Society, 2020, UPES, Uttarakhand, India.
4. International Conference on Mathematical Sciences and Computational Intelligence, (ICMSCI-2020), Dec 2020, SMVD University, Katra, India.
5. IEEE International Conference On Emerging Smart Computing And Informatics 2020 (IEEE-ESCI 2020), held on 12-14 March 2020 at Institute of Information Technology, Pune, Maharashtra, India.
6. National Conference on Recent Advances and innovations in Computer Science and Inform ation Technology, ICRAICSIT, held on 24–25 April 2018, BGSB University, Rajouri, India.

7. National conference on emerging trends and innovations in electronics and communications, ETIECE, held on August 26–27, 2017, at BGSB University, Rajouri, India.
8. 6th International Conference on Recent Trends and Advancements in Engineering and Technology (ICRTAET) 17-18 January 2020 at Shri Mata Vaishno Devi University, Katra, Jammu and Kashmir, India.

National Seminar attended

1. National Seminar on" Emerging trends in data sciences and artificial Intelligence" (2016) BGSB University, Rajouri.
2. National Seminar on Bio-informatics" Trends in Genomics and Proteomics",2019, SMVD University, Katra.

Faculty Development Programme (FDP) attended

1. Wireless and Mobile Communication, Electronics and ICT Academy, IIT Roorkee, held at SMVDU, 03-07 Dec, 2018
2. Data Analytics Techniques with Python, Electronics and ICT Academy, IIT Roorkee, held at SMVDU, 04-08 Sep, 2018
3. Artificial Intelligence and Machine Learning, Electronics and ICT Academy, IIT Roorkee, held at SMVDU, 17-21 Dec, 2018
4. Internet of Things (IoT) with Cloud Applications, Electronics and ICT Academy, IIT Roorkee, held at SMVDU, 04-08 Feb, 2019

Workshops attended

1. Mathematical and statistical methods for Machine learning, NIT Hamirpur (H.P), India. 7-11 Nov,2020
2. Foundation of Fuzzy Set and Fuzzy Logic Applications, TEQUIP-III Sponsered, SMVDU, 30 Sep-4 Oct,2019
3. Ethical Hacking and Cyber Security, SMVDU, 24-26 Sep 2019
4. Fundamentals of Deep Learning for Computer Vision, MIET, 19-20 Oct 2019
5. Outcome Based Education (OBE), SOET, BGSBU, 19-20 March 2018
6. Machine Learning: Tools and Techniques, SOET, BGSBU, 31 Oct- 4 Nov 2018
7. LibreOffice Suite base Training sponsored by the spoken tutorial project, IIT Bombay, held at BGSBU, Jan 2017
8. Electrical Systems in Thermal power plant, BGSBU, 11 May 2017
9. Basics of MATLAB programming and Simulink, SOET, BGSBU, 15-19 Nov 2016
10. Big Data / Hadoop, E-learning Solutions, IIT Kanpur, held at BGSU, 15-16 March 2016
11. Kaizen Robeonics program on Android Application,2 Days,2013, NIMS University, Jaipur

Short Terms Course (STC) attended

1. Participated in AICTE recognized Short Term Course on " MATLAB and LABVIEW with its Hardware Interface Through ICT", by National Institute of Technical Teachers and Research Chandigarh, held at BGSBU, 29 Jan-02 Feb 2018

2. Participated in AICTE recognized Short Term Course on " Scilab Programming", by National Institute of Technical Teachers and Research Chandigarh, held at BGSBU, 21-25 Aug 2017

3. Participated in AICTE recognized Short Term Course on " Sustainable Environment Through ICT" by National Institute of Technical Teachers and Research Chandigarh, held at BGSBU, 14-18 March 2016

Resident/Hostel Warden

1. Girls Hostel Warden at BGSBU, India, December 2015– August 2018

REFERENCE

Dr. Baijnath Kauhsik: Associate Professor, Shri Mata Vaishno Devi University, Katra, Jammu, India. baijnath.kaushik@smvdu.ac.in

Prof. Jabir Ali: Professor at Indian Institute of Management, Jammu, JK, India. jabirali@iimj.ac.in

Dr. Abdul Wahid: Assistant Professor at IIIT Dharwad , India. abdul.wahid@iiitdwd.ac.in

Dr. Farrukh Khalid: Assistant Professor at IIT Guwahati, India. f.khalid@iitg.ac.in