

Academic Resume



Iftikhar Ahmad

Associate Professor, Information Technology Department

I am an Associate Professor in Information Technology with experience in a variety of roles. I am teaching courses at BS, MS and PhD level along with supervision of many theses. Further, I am involved in various curriculum development and departmental committees. My research interest includes cyber security, intrusion detection, IoT security, and healthcare. Moreover, I have completed several research projects those are supported by several national and international grants.

Contact Information.

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Highest Degree.

2011, PhD in Information Technology, Intrusion Detection/ Information Security, Universiti Teknoli PETRONAS, Malaysia.

Academic and Professional Experiences.

1. **2017 - Present**
Associate Professor, IT department, FCIT, King Abdulaziz University, Jeddah, KSA.
2. **2016 - 2017**
Associate Professor, Computer Science department, Mohi- ud- Din Islamic University, AJK.

Research Interests.

Information security and cyber security, IoT Security, Healthcare, Big Data Analytics, Applications of ML, DL, FSL and data mining in different domains.

Teaching Interests.

Network security, Intrusion detection system, Operating system, Information security, Computer Networks, Cybersecurity.

Certifications and Trainings.

1. Router Training (Associate).
2. Red Hat Linux 8 Training.
3. CCNA.
4. MCSE.

Social, Scientific and Professional Affiliation.

1. -, Member, IEEE.
2. -, Member, ACM.

3. -, Member, Computer Society.
4. -, Member, Communications Society.
5. -, Member, International Association of Engineers.

Excellence Awards and Patents.

1. 2014, Patent, APPLICATION OF NEURAL NETWORK IN INTRUSION DETECTION AND PERFORMANCE EVALUATION, MYIPO,MALAYSIA.

Funded Projects.

1. 2019, Classification and Analysis of Biologically Inspired Big Data Using Deep Neural Network, DSR, KAU, KSA
2. 2018, Towards Improving the Intrusion Detection Through Extreme Learning Machine, DSR, KAU, KSA
3. 2020, Intrusion detection using one-dimensional convolutional neural network, DSR, KAU,KSA
4. 2021, Feature Subset Selection Using Self Adaptive Particle Swarm Optimization for Intrusion Detection, DSR, KAU, KSA

Publications.

1. Theyab Althiyabi, Iftikhar Ahmad, Madini O. Alassafi, "Enhancing Iot Security: A Few-Shot Learning Approach For Intrusion Detection", Mathematics, vol: 12, pp. 1055, 2024.
DOI: [10.3390/math12071055](https://doi.org/10.3390/math12071055)
2. Muhammad Sher Ramzan, Anees Asghar, Ata Ullah, Fawaz Alsolami, Iftikhar Ahmad, "A Bee Colony-Based Optimized Searching Mechanism In The Internet Of Things", Future Internet, vol: 16, pp. 35, 2024.
DOI: [10.3390/fi16010035](https://doi.org/10.3390/fi16010035)
3. Momna Ali Shah, Muhammad Javed Iqbal, Neelum Noreen, Iftikhar Ahmed, "An Automated Text Document Classification Framework Using Bert", International Journal Of Advanced Computer Science And Applications, vol: 14, 2023.
DOI: [10.14569/IJACSA.2023.0140332](https://doi.org/10.14569/IJACSA.2023.0140332)
4. Iftikhar Ahmad and Hadi S. Al Qahtani, "A Comparative Analysis Of Gradient Boosting, Random Forest And Deep Neural Networks In Intrusion Detection System", Arpn Journal Of Engineering And Applied Sciences, pp. 1392-1402, 2023.
DOI: [10.59018/0623177](https://doi.org/10.59018/0623177)
5. Muhammad Javed Iqbal, Muhammad Aasem, Iftikhar Ahmad, Madini O. Alassafi, Sheikh Tahir Bakhsh, Neelum Noreen, Ahmed Alhomoud, "On Application Of Lightweight Models For Rice Variety Classification And Their Potential In Edge Computing", Foods, vol: 12, pp. 3993, 2023.
DOI: [10.3390/foods12213993](https://doi.org/10.3390/foods12213993)
6. Iftikhar Ahmad, Muhammad Imran, Abdul Qayyum, Muhammad Sher Ramzan, Madini O. Alassafi, "An Optimized Hybrid Deep Intrusion Detection Model (Hd-Idm) For Enhancing Network Security", Mathematics, vol: 11, pp. 4501, 2023.
DOI: [10.3390/math11214501](https://doi.org/10.3390/math11214501)
7. Asrar Ahmed Sabir, Iftikhar Ahmad, Hassan Ahmad, Muhammad Rafiq, Muhammad Asghar Khan, Neelum Noreen, "Consumer Acceptance And Adoption Of Ai Robo-Advisors In Fintech Industry", Mathematics, vol: 11, pp. 1311, 2023.
DOI: [10.3390/math11061311](https://doi.org/10.3390/math11061311)
8. Yousef Almaghthawi, Iftikhar Ahmad, Fawaz E. Alsaadi, "Performance Analysis Of Feature Subset Selection Techniques For Intrusion Detection", Mathematics, vol: 10, pp. 4745, 2022.
DOI: [10.3390/math10244745](https://doi.org/10.3390/math10244745)
9. Alaa Mohammed Banaamah, Iftikhar Ahmad, "Intrusion Detection In Iot Using Deep Learning", Sensors, vol: 22, pp. 8417, 2022.
DOI: [10.3390/s22218417](https://doi.org/10.3390/s22218417)
10. Iftikhar Ahmad, Abdul Qayyum, Brij B. Gupta, Madini O. Alassafi and Rayed A. AlGhamdi, "Ensemble Of 2d Residual Neural Networks Integrated With Atrous Spatial Pyramid Pooling Module For Myocardium Segmentation Of Left Ventricle Cardiac Mri", 10, 2022.
11. Iftikhar Ahmad, Qazi Emad Ul Haq, Muhammad Imran, Madini O. Alassafi and Rayed A. AlGhamdi, "An Efficient Network Intrusion Detection And Classification System", 10, 2022.
12. Muhammad Javed Iqbal, Muhammad Munwar Iqbal, Iftikhar Ahmad, Madini O. Alassafi, Ahmed S. Alfakeeh, Ahmed Alhomoud, Farhan Ullah, "Real-Time Surveillance Using Deep Learning", Security And Communication Networks, vol: 2021, pp. 1-17, 2021.
DOI: [10.1155/2021/6184756](https://doi.org/10.1155/2021/6184756)
13. Muhammad Javed Iqbal, Muhammad Munwar Iqbal, Iftikhar Ahmad, Muneer Ahmad, N. Z. Jhanjhi, Sultan Aljahdali, Memoona Mushtaq, "Smart Home Automation Using Intelligent Electricity Dispatch", Ieee Access, vol: 9, pp. 118077-118086, 2021.
DOI: [10.1109/ACCESS.2021.3106541](https://doi.org/10.1109/ACCESS.2021.3106541)

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14. Syed Yasser Arafat, Nabeel Ashraf, Muhammad Javed Iqbal, Iftikhar Ahmad, Suleman Khan, Joel J. P. C. Rodrigues, "Urdu Signboard Detection And Recognition Using Deep Learning", Multimedia Tools And Applications, 2021.
DOI: [10.1007/s11042-020-10175-2](https://doi.org/10.1007/s11042-020-10175-2)
15. Farrukh Mahmood, Farrukh Zeeshan Khan, Muneer Ahmed, Iftikhar Ahmad, Brij B. Gupta, "Greencloudnet++: Simulation Framework For Energy Efficient And Secure, Green Job Scheduling In Geographically Distributed Data Centers", Transactions On Emerging Telecommunications Technologies, 2021.
DOI: [10.1002/ett.4232](https://doi.org/10.1002/ett.4232)
16. Neelum Noreen , Sellapan Palaniappan, Abdul Qayyum, Iftikhar Ahmad, Madini O. Alassafi, "Brain Tumor Classification Based On Fine-Tuned Models And The Ensemble Method", Computers, Materials & Continua, 2021.
17. Abdul Qayyum, Iftikhar Ahmad, Wajid Mumtaz, Madini O. Alassafi, Rayed Alghamdi, Moona Mazher, "Automatic Segmentation Using A Hybrid Dense Network Integrated With An 3d-Atrous Spatial Pyramid Pooling Module For Computed Tomography (Ct) Imaging", Ieee Access, vol: 8, pp. 169794-169803, 2020.
DOI: [10.1109/ACCESS.2020.3024277](https://doi.org/10.1109/ACCESS.2020.3024277)
18. Muhammad Shahid Iqbal, Iftikhar Ahmad, Muhammad Asif, Sun?Hee Kim, Raja Majid Mehmood, "Drug Investigation Tool: Identifying The Effect Of Drug On Cell Image By Using Improved Correlation", Software: Practice And Experience, vol: 51, pp. 260-270, 2020.
DOI: [10.1002/spe.2903](https://doi.org/10.1002/spe.2903)
19. Muneer Ahmad, Iftikhar Ahmad, Muhammad Bilal, Alireza Jolfaei, Raja Majid Mehmood, "N N Signal Analysis Tool: Intelligent Noise Suppression Window Filtern", Software: Practice And Experience, vol: 51, pp. 670-685, 2020.
DOI: [10.1002/spe.2880](https://doi.org/10.1002/spe.2880)
20. Iftikhar Ahmad, Rayan Atteah Alsemmeiri, "Towards Improving The Intrusion Detection Through Elm (Extreme Learning Machine)", Computers, Materials & Continua, vol: 65, pp. 1097-1111, 2020.
DOI: [10.32604/cmc.2020.011732](https://doi.org/10.32604/cmc.2020.011732)
21. Muhammad Shoaib, Muhammad Imran, Fazli Subhan, Iftikhar Ahmad, "Towards A Low Complexity Scheme For Medical Images In Scalable Video Coding", Ieee Access, vol: 8, pp. 41439-41451, 2020.
DOI: [10.1109/ACCESS.2020.2976715](https://doi.org/10.1109/ACCESS.2020.2976715)
22. Furqan Shahid, Iftikhar Ahmad, Muhammad Imran, Muhammad Shoaib, "Novel One Time Signatures (Nots): A Compact Post-Quantum Digital Signature Scheme", Ieee Access, vol: 8, pp. 15895-15906, 2020.
DOI: [10.1109/ACCESS.2020.2966259](https://doi.org/10.1109/ACCESS.2020.2966259)
23. Neelum Noreen, Sellappan Palaniappan, Abdul Qayyum, Iftikhar Ahmad, Muhammad Imran, Muhammad Shoaib, "A Deep Learning Model Based On Concatenation Approach For The Diagnosis Of Brain Tumor", Ieee Access, vol: 8, pp. 55135-55144, 2020.
DOI: [10.1109/ACCESS.2020.2978629](https://doi.org/10.1109/ACCESS.2020.2978629)
24. Muhammad Shahid Iqbal, Iftikhar Ahmad, Luo Bin, Suleman Khan, Joel J. P. C. Rodrigues, "Deep Learning Recognition Of Diseased And Normal Cell Representation", Transactions On Emerging Telecommunications Technologies, 2020.
DOI: [10.1002/ett.4017](https://doi.org/10.1002/ett.4017)
25. Iftikhar Ahmad, Muhammad Javed Iqbal, Mohammad Basher, "Biological Data Classification And Analysis Using Convolutional Neural Network", Journal Of Medical Imaging And Health Informatics, vol: 10, pp. 2459-2465, 2020.
DOI: [10.1166/jmihi.2020.31792459](https://doi.org/10.1166/jmihi.2020.31792459)

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26. Muhammad Shoaib, Muhammad Imran, Fazli Subhan, Iftikhar Ahmad, "Towards A Low Complexity Scheme For Medical Images In Scalable Video Coding", Ieee Access, vol: 8, pp. 41439-41451, 2020.
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27. Nawal Zaied Almuzaini, Iftikhar Ahmad, "Formal Analysis Of The Signal Protocol Using The Scyther Tool", 2019 2nd International Conference On Computer Applications & Information Security (Iccais), pp. 1-6, 2019.
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28. Mohammad Aljohani, Iftikhar Ahmad, Mohammad Basher, Madini O. Allassafi, "Performance Analysis Of Cryptographic Pseudorandom Number Generators", Ieee Access, vol: 7, pp. 39794-39805, 2019.
DOI: [10.1109/ACCESS.2019.2907079](https://doi.org/10.1109/ACCESS.2019.2907079)
29. M. Awais, M.J. Iqbal, I. Ahmad, M. O. Allassafi, R.A. AlGhamdi, M. Basher, M. Waqas, "Real-Time Surveillance Through Face Recognition Using Hog And Feedforward Neural Networks", Ieee Access, pp. 1-1, 2019.
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30. I. Ahmad, M. Basher, M. J. Iqbal, A. Raheem, "Performance Comparison Of Support Vector Machine, Random Forest, And Extreme Learning Machine For Intrusion Detection", Ieee Access, pp. 1-1, 2018.
DOI: [10.1109/ACCESS.2018.2841987](https://doi.org/10.1109/ACCESS.2018.2841987)
31. Iftikhar Ahmad, Irshad Ahmad, Fazal-e-Amin, Muhammad Imran, Kashif Sattar, Mohammad Shoaib, Muhammad Nasir, "Towards Intrusion Detection To Secure Vanet-Assisted Healthcare Monitoring System", Journal Of Medical Imaging And Health Informatics, vol: 7, pp. 1391-1398, 2017.
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32. Fei Yu, Chin-Chen Chang, Jian Shu, Iftikhar Ahmad, Jun Zhang, Jose Maria de Fuentes, "Recent Advances In Security And Privacy For Wireless Sensor Networks 2016", Journal Of Sensors, vol: 2017, pp. 1-3, 2017.
DOI: [10.1155/2017/3057534](https://doi.org/10.1155/2017/3057534)
33. Suleman Khan, Abdullah Gani, Ainuddin Wahid Abdul Wahab, Muhammad Shiraz, Iftikhar Ahmad, "Network Forensics: Review, Taxonomy, And Open Challenges", Journal Of Network And Computer Applications, vol: 66, pp. 214-235, 2016.
DOI: [10.1016/j.jnca.2016.03.005](https://doi.org/10.1016/j.jnca.2016.03.005)
34. Aamir Shahzad, Malrey Lee, Neal Xiong, Gisung Jeong, Young-Keun Lee, Jae-Young Choi, Abdul Mahesar, Iftikhar Ahmad, "A Secure, Intelligent, And Smart-Sensing Approach For Industrial System Automation And Transmission Over Unsecured Wireless Networks", Sensors, vol: 16, pp. 322, 2016.
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35. Iftikhar Ahmad, "Feature Selection Using Particle Swarm Optimization In Intrusion Detection", International Journal Of Distributed Sensor Networks, vol: 2015, pp. 1-8, 2015.
DOI: [10.1155/2015/806954](https://doi.org/10.1155/2015/806954)
36. Fei Yu, Chin-Chen Chang, Jian Shu, Iftikhar Ahmad, Jun Zhang, Jose Maria de Fuentes, "Recent Advances In Security And Privacy For Wireless Sensor Networks", Journal Of Sensors, vol: 2015, pp. 1-2, 2015.
DOI: [10.1155/2015/169305](https://doi.org/10.1155/2015/169305)
37. Iftikhar Ahmad, Aneel Rahim, Adeel Javed, Hafiz Malik, "Security Of Information And Networks", The Scientific World Journal, vol: 2015, pp. 1-2, 2015.
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