

Mr. ABHISHEK KUMAR PANDEY

PERSONAL DATA

NAME: Abhishek Kumar Pandey
GENDER: Male
PLACE AND DATE OF BIRTH: Balrampur, India | 26 July 1999
ADDRESS: Terhi Bazar Near G.I.C. Balrampur, Uttar Pradesh, India-271201
PHONE: +91 8545949246
EMAIL: abhishek.pandey@research.iiit.ac.in
HOMEPAGE: abhipandey5.github.io

WORK EXPERIENCE

since 07/2022	Ph.D. in CSE from the Center for Security, Theory and Algorithmic Research (C-STAR), under the supervision of Prof. Ashok Kumar Das , International Institute of Information Technology, Hyderabad.
09/2021–06/2022	Assistant Professor (Guest) in Department of Computer Science, M. L. K. PG. College, Balrampur.
09/2020–08/2021	Researcher at Information Technology Laboratory, Babasaheb Bhimrao Ambedkar University, (A Central University), Lucknow under the supervision of Prof. R. A. Khan.

SCIENTIFIC EDUCATION

06/2022 - Present	RESEARCH SCHOLAR. International Institute of Information Technology, Hyderabad. Supervisor: Prof. Ashok Kumar Das Centre for Security, Theory and Algorithmic Research (C-STAR)
07/2018 - 07-2020	M.Sc. CYBER SECURITY Babasaheb Bhimrao Ambedkar University (A Central University), Lucknow Supervisor: Prof. R. A. Khan Department of Information Technology
07/2015 - 06-2018	BACHELOR OF COMPUTER APPLICATION (BCA) Siddhartha University, Kapilvastu, India “University Gold Medalist” Department of Computer Application

RESEARCH INTEREST

- **Broad:** Understanding and classifying various aspects of Cyber Security/Information Security and its different factors for advanced authentication.
- **Current Focus:** Secure Authentication, AI/ML Security, Cyber Physical System, Data Security, Health Informatics, Malware Analysis, Secure Web Application Development Strategies through MCDM methods.

VISITING RESEARCHER

17-Nov-2025 - 22-Nov-2025	EXCHANGE PROGRAM RESEARCHER University of South-Eastern Norway (USN) Hasbergs vei 36, 3616 Kongsberg, Norway Host: Prof. Mohsen Toorani Department
23-Nov-2025 - 29-Nov-2025	EXCHANGE PROGRAM RESEARCHER NTNU – Norwegian University of Science and Technology Teknologivegen 22, 2815 Gjøvik, Norway Host: Prof. Sokratis Katsikas Department

PUBLICATION STATISTICS

Total No. of Book Chapters	04
Total No. of Journal Publications	22
Total No. of Conference Publications	03
Total No. Publications	29

CITATION INDICES

Citations	686
h-index	11
i10-index	11

PUBLICATIONS [DETAILED]

SCI:	25
WEB OF SCIENCE:	29
SCOPUS:	29

BOOK CHAPTERS [CH-1 : CH-4]

CH-4 Sarita Shukla, Vanshita Gupta, **Abhishek Kumar Pandey**, Rajat Sharma, Yogesh Pal, Binneet Kumar Gupta, Alka Agrawal. **Managing IoT – Cloud-based Security.** *Computational Intelligent Security in Wireless Communications.* CRC Press, 2022.

CH-3 **Abhishek Kumar Pandey**, Ashutosh Kumar Tripathi, Alka Agrawal, Rajeev Kumar, Raees Ahmad Khan. **Selecting and Assessing the Importance of Malware Analysis Methods for Web-based Biomedical Services through Fuzzy based Decision Making Procedure.** *Recent advances in Nature Inspired Optimization Algorithms, Techniques and Biomedical Applications.* De-Gruyter, 2020.

CH-2 **Abhishek Kumar Pandey**, Ashutosh Tripathi, Gayatri Kapil, Virendra Singh, Mohd. Waris Khan, Alka Agrawal, Rajeev Kumar, Raees Ahmad Khan. **Trends in Malware Attacks-Identification and Mitigation Strategies.** *Critical Concepts, Standards, and Techniques in Cyber Forensics.* IGI Global, 2019.

CH-1 **Abhishek Kumar Pandey**, Ashutosh Tripathi, Gayatri Kapil, Virendra Singh, Mohd. Waris Khan, Alka Agrawal, Rajeev Kumar, Raees Ahmad Khan. **Current Challenges of Digital Forensics in Cyber Security.** *Critical Concepts, Standards, and Techniques in Cyber Forensics.* IGI Global, 2019.

JOURNAL ARTICLES [J-1 : J-22]

- J-22 **Abhishek Kumar Pandey**, Basudeb Bera, Anusha Vangala, Ashok Kumar Das, Youngho Park, and Biplab Sikdar. **Quantum-Safe Digital Twin Authentication for ML-Driven Early Disease Detection in Healthcare Systems.** *IEEE Journal of Biomedical and Health Informatics*, Feb 2026.
- J-21 **Abhishek Kumar Pandey**, Vincenzo Sammartino, Anusha Vangala, Ashok Kumar Das. **Blockchain-Enabled Quantum-Resistant Hybrid Isogeny-Based Signcryption Framework for Digital Twin-Assisted Healthcare Systems.** *IEEE Communications Standards Magazine*, Feb 2026.
- J-20 **Abhishek Kumar Pandey**, Sherli Zeadally, Ashok Kumar Das, Neeraj Kumar. **Secure Integration of Cyber Engineering and Medical Cyber-Physical System: A Survey and Open Issues.** *ACM Computing Surveys*, June 2025. (2024 SCI Impact Factor: 28)
- J-19 Rohan Tripathi, Ritam Rao, Vivekananda Bhat K, **Abhishek Kumar Pandey**, Ashok Kumar Das. **Secure Blockchain Integration Approach for Knowledge Discovery in Industrial Internet of Things.** *IEEE OpenJournal of the Communications Society*, Vol. 6, pp. 4772-4787, May 2025. (2024 SCI Impact Factor: 6.1)
- J-18 **Abhishek Kumar Pandey**, Ashok Kumar Das, Mohammad Wazid, Kuljeet Kaur, Youngho Park, and Mohammad Mehedi Hassan. **Uncrewed Aerial Vehicles Empowering Secure Authentication in Cognitive IoMT for Transformative Knowledge Discovery in Data.** *IEEE Internet of Things Journal*, Vol. 12, No. 9, pp. 11329-11346, May 2025. (2024 SCI Impact Factor: 8.9)
- J-17 **Abhishek Kumar Pandey**, Ashok Kumar Das, Rajeev Kumar, Joel J. P. C. Rodrigues. **Secure Cyber Engineering for IoT-Enabled Smart Healthcare System.** *IEEE Internet of Things Magazin*, 2024.
- J-16 Hosam Alhakami, Abdullah Baz, Wajdi Alhakami, **Abhishek Kumar Pandey**, Alka Agrawal, Raees Ahmad Khan. **A Usability Management Framework of Secure Healthcare Information System.** *Computer Systems Science and Engineering*, 2022.
- J-15 **Abhishek Kumar Pandey**, Jihad F. Al-Amri, Ahmad F. Subahi, Rajeev Kumar, Raees Ahmad Khan. **Analyzing the Implications of COVID-19 Pandemic through an Intelligent-Computing Technique.** *Computer Systems Science and Engineering*, 2021.
- J-14 Mohammad Zarour, Mamdouh Alenezi, Md Tarique Jamal Ansari, **Abhishek Kumar Pandey**, Masood Ahmad, Alka Agrawal, Rajeev Kumar, Raees Ahmad Khan. **Ensuring Data Integrity of Healthcare Information in the Era of Digital Health.** *Healthcare Technology Letters*, 2021.
- J-13 Wael Alosaimi, Md Tarique Jamal Ansari, Abdullah Alharbi, Hashem Alyami, Adil Hussain Seh, **Abhishek Kumar Pandey**, Alka Agrawal, Raees Ahmad Khan. **Evaluating the Impact**

of Different Symmetrical Models of Ambient Assisted Living Systems. *Symmetry*. 13 (3), 450 2021.

- J-12 Hashem Alyami, Mohd Faizan, Wael Alosaimi, Abdullah Alharbi, **Abhishek Kumar Pandey**, Md Tarique Jamal Ansari, Alka Agrawal, Raees Ahmad Khan. **An Ensemble Approach to Detect Firearm Listing for Identification of Key Vendors on the Dark Web Cryptomarkets**. *CSSE-Computer Systems Science and Engineering*. 2021.
- J-11 Wael Alosaimi, Abdullah Alharbi, Hashem Alyami, Masood Ahmad, **Abhishek Kumar Pandey**, Rajeev Kumar, Raees Ahmad Khan. **Impact of Tools and Techniques for Securing Consultancy Services**. *CSSE-Computer Systems Science and Engineering*, 2021.
- J-10 Abdulaziz Attaallah, Masood Ahmad, Md Tarique Jamal Ansari, **Abhishek Kumar Pandey**, Rajeev Kumar, Raees Ahmad Khan. **Evaluating Device Security of Internet of Healthcare Things**. *IASC-Intelligent Automation & Soft Computing*, 2021.
- J-9 Wajdi Alhakami, Abdullah Baz, Hosam Alhakami, **Abhishek Kumar Pandey**, Raees Ahmad Khan. **Symmetrical Model of Smart Healthcare Data Management: A Cybernetics Perspective**. *Symmetry*. 12, 2089, 2020.
- J-8 Abdulaziz Attaallah, Sabita Khatri, Mohd Nadeem, Syed Anas Ansar, **Abhishek Kumar Pandey**, Alka Agrawal. **Prediction of COVID-19 Pandemic Spread in Kingdom of Saudi Arabia**. *CSSE- Computer Systems Science and Engineering*, 2020.
- J-7 MAMDOUH ALENEZI, **Abhishek Kumar Pandey**, Richa Verma, Mohd Faizan, Shalini Chandra, Alka Agrawal, Rajeev Kumar, Raees Ahmad Khan. **Evaluating the Impact of Software Security Tactics: A Design Perspective**. *CMC-Computers, Materials & Continua*, 2020.
- J-6 Adil Hussain Seh, Masood Ahmad, Mohd Nadeem, **Abhishek Kumar Pandey**, Alka Agrawal, Rajeev Kumar, Raees Ahmad Khan. **Usable-Security Assessment of Healthcare Software System Through Fuzzy ANP-TOPSIS Method**. *International Journal of System Dynamics Applications (IJSDA)*. Volume 10, Issue 4, Article 3, 2022.
- J-5 Alka Agrawal, **Abhishek Kumar Pandey**, Abdullah Baz, Hosam Alhakami, Wajdi Alhakami, Rajeev Kumar, Raees Ahmad Khan. **Evaluating the Security Impact of Healthcare Web Applications through Fuzzy based Hybrid Approach of Multi-Criteria Decision-Making Analysis**. *IEEE Access*. Volume 8, 2020.
- J-4 **Abhishek Kumar Pandey**, Fawaz Alsolami. **Securing Web Application through Malware Analysis: An Examination and Future Recommendations**. *International Journal of Advanced Computer Science and Applications (IJACSA)*. Volume 11, Issue 7, 2020.
- J-3 Rajeev Kumar, **Abhishek Kumar Pandey**, Abdullah Baz, Hosam Alhakami, Wajdi Alhakami, Alka Agrawal, Raees Ahmad Khan. **Fuzzy-Based Symmetrical Multi-Criteria Decision-Making Procedure for Evaluating Impact of Harmful Factors of Healthcare Information Security**. *Symmetry*. Volume 12, pp. 664, 2020.

J-2 **Abhishek Kumar Pandey**, Asif Irshad Khan, Yoosef B. Abushark, Md Mottahir Alam, Alka Agrawal, Rajeev Kumar, Raees Ahmad Khan. **Key Issues in Healthcare Data Integrity: Analysis and Recommendations.** *IEEE Access. Volume 8, Issue 3, pp. 40612-40628, 2020.*

J-1 **Abhishek Kumar Pandey**, Ashutosh Kumar Tripathi, Mamdouh Alenezi, Alka Agrawal, Rajeev Kumar, Raees Ahmad Khan. **A Framework for Producing Effective and Efficient Secure Code through Malware Analysis.** *International Journal of Advanced Computer Science and Applications (IJACSA). Volume 11, Issue 2, pp. 597-503, 2020.*

INTERNATIONAL CONFERENCE PAPERS [C-1 : C-3]

C-3 **Abhishek Kumar Pandey**, Prithwi Bagchi, Debnath Ghosh, Ashok Kumar Das, Ravi Kumar Kappagantu, Srinivas V Katakam, and Jitendra Chougala. "Post-Quantum Secure Lattice-Based Authentication Scheme for IoT-Enabled Contactless Smart Payments," in **7th IEEE Computers, Communications and IT Applications Conference (ComComAp 2025)**, 14-17 December 2025, Madrid, Spain.

C-2 **Abhishek Kumar Pandey**, Debnath Ghosh, Prithwi Bagchi, Ashok Kumar Das, Ravi Kumar Kappagantu, Srinivas V Katakam, and Jitendra Chougala. "Post-Quantum DLT Framework for Secure Financial Transactions in Banking Applications," in **18th IEEE International Conference on COMmunication Systems & NETworkS (COMSNETS 2026)**, Cybersecurity and Privacy (CSP) Workshop, January 6 - 10, 2026, Bangalore, India. **[Best Paper Award]**

C-1 Snehal Jain, **Abhishek Kumar Pandey**, Ashok Kumar Das, and Shantanu Pal. "Post-Quantum Secure IoT-Enabled Crop Recommender System Using Machine Learning," in **18th IEEE International Conference on COMmunication Systems & NETworkS (COMSNETS 2026)**, Systems for the Future of AI/ML Workshop (SysAI), January 6 - 10, 2026, Bangalore, India. **[Best Paper Award]**

COMMITTEE MEMBER (CONFERENCES/WORKSHOP)

- Technical Program Committee (TPC) Member for **7th Computers, Communications and IT Applications Conference (ComComAp 2025)** at Madrid, Spain from 14-17 December 2025.
- Organizing Committee Member for **5-Day National Workshop and Boot-camp on Cyber Security and Blockchain (NWBCSB 2025)** at IIIT Hyderabad from 1-5 March 2025.

ACHIEVEMENTS

- Topper of University and Honored by Governor of Uttar Pradesh in Dec. 2018.
- Participated in "**19th State Level National Children Science Congress UP**" from November 18-20, 2011, in JAUNPUR and Entitled with "*State Child Scientist*".

PROFESSIONAL RESPONSIBILITIES

- Reviewer for IEEE Transactions on Information Forensics and Security (TIFS), **[#1 Journal for Security in the world].**
- Reviewer for Scientific Reports (Nature).
- Reviewer for IEEE Open Journal of the Communications Society.
- Reviewer for KSII Transactions on Internet and Information Systems.

- Reviewer for IET Communications.
- Reviewer for IEEE Access.
- Reviewer for Security Journal, Palgrave, Springer Nature.
- Reviewer for BMC Medical Informatics and Decision Making, Springer Nature.
- Reviewer for BMC Primary Care, Springer Nature.

SCIENTIFIC SOCIETY MEMBERSHIPS

- Professional ACM Member (Member Number: 7388884)
- Rosalind Member (Specially Invited) of London Journals Press (Membership ID: QB76562).
- A Member of International Computer Science and Engineering Society (ICSES) (Membership ID: 9243).
- A Member of Institute for Engineering Research and Publication (IERP) (Membership ID: SM95746210).
- A Member of Internet Society India – Global Member (Membership ID: 2221065).
- A Member of International Association of Engineers (IAENG) (Membership ID: 267366).

REFEREES

Prof. Ashok Kumar Das

Position: Full Professor

Department: Centre for Security, Theory and Algorithmic Research

Institution: International Institute of Information Technology (IIIT), Hyderabad, India

Email: iitkgp.akdas@gmail.com

Abhishek Kumar Pandey

PhD Scholar, IIIT Hyderabad



February 23, 2026
