

Faculty Profile

Name: Mr. Ajit Karki
Designation: Assistant Professor
Teaching Areas: Network Security
Big Data Analytics



Research Interests: Cryptography
Machine Learning
Cloud Computing
Neural Networks

Education: MTech. (Computer Science and Engineering)
Sikkim Manipal Institute of Technology, Majhitar, East Sikkim (2014).
PhD.(CSE)Pursuing, ICFAI University,
Tripura, Kamalghat, Agartala.

Research/Selected Publication:

- 1 .Ajit Karki, "A Discussion on Elliptic Curve Cryptography and its Application", Published in Volume 2, issue: 3, in "International Journal of Research in Advent Technology", e-ISSN 2321-9637]. Publication Date: 15th March 2014.
2. Ajit Karki, "Elliptic Curve Cryptography-A New Approach to Public key Cryptography", Published in Volume 3, Issue 9, in "International Journal of Engineering Sciences & Technology", [e-ISSN 2277-9655]. Publication Date: 16th September 2014.
3. Ajit Karki, "Elliptic Curve Diffie Hellman" (ECDH), published in Volume 1, Issue 8, in "International Journal of Advanced Research in Ecology, Science and Technology", [ISSN: 2395-695X]. Publication Date: 22nd November 2015. Paper has been awarded The "SILVER ACHIEVER - 2015".
4. Ajit Karki, Elliptic Curve Cryptography (ECC), published in "International Conference on Recent Trends in Engineering and Technology, [ICRTET'16], 28th April 2016, Chennai, Tamilnadu, India.
5. Ajit Karki, "An Overview of Public Key Cryptography" "International Journal of Computer Science", ISSN-2320-7868, 30th Dec 2016.
6. Ajit Karki, "A Comparative Analysis of PKC" "International Journal of Modern Computer Science and Engineering", vol: 4, issue: 6 "ISSN-2320-5869, 20th Sep 2016.
7. Ajit Karki, "Elliptic Curve Cryptography", "ISER - International Conference on Advanced Computer Science and Information Technology", (ICACSI-17), 24th Dec 2017.
8. Ajit Karki, "A Review on Advanced Encryption Standard-(AES)", International Journal of Computer Sciences", Volume-6, Issue-8, Aug2018. UGC approved journal, Journal no: 63193.
9. Ajit Karki, "An Analysis on Point Mapping Methods-Elliptic curve Cryptosystems", 25th International Conference on Applied Science, Engineering and Technology, Goa, India, 29 December 2019.
10. Ajit Karki, "INDOCRYPT 2015"-16th International Conference on Cryptology in India, Bangalore, December 6-9, 2015, Proceedings. Lecture Notes in Computer Science 9462, Springer 2015, ISBN 978-3-319-26616-9.

11. Ajit Karki, “Comprehensive Security Analysis and Threat Mitigation Strategies for Software-Defined Networking (SDN) Environments”, IEEE, 3rd International Conference on Intelligent Systems, Advanced Computing and Communication (ISACC) at Assam University, Silchar, India. February 27th-28th 2025, Publisher: IEEE.
12. Ajit Karki, “A Paradigm Shift in Networking: The Role and Architecture of SDN”, , International Conference on Robotics, Communication, and Soft Computing, held at National Institute of Technology Sikkim, Ravangla, Dated: May 1-3, 2025. Publisher: Springer.
13. Ajit Karki, “A Hybrid Cryptographic framework using ECC for Secure Communication in Software Defined Networking”, IEEE International Conference on Emerging Applications of Intelligence and Computing (EAIC 2025), at Dr. B.R. Ambedkar National Institute of Technology, Jalandhar, India, from June 5–7, 2025. Publisher: IEEE.
14. Ajit Karki, “Secure Framework to Enhance Security Using RSA Algorithm in Software Defined Network (SDN)”, International Conference on Digital Technologies for Business Excellence (ICDTBESDVB 2025), IIT(ISM), Dhanbad, from July 5-6, 2025. Publisher: Taylor & Francis.