

Faculty Profile



Name: Dr. Rashmi Sahay

Designation: Assistant Professor

Teaching Areas: Data Structure, AI, Machine Learning, Software Engineering

Research Interests: Internet of Thing, Security, Applied ML, Soft Computing

Education:

1. Ph.D. CSE- Security in Internet of Things, Birla Institute of Technology and Science, Pilani
2. M.Tech (Computer Science), Birla Institute of Technology, Mesra
3. B.E (Electrical Engineering), Rajiv Gandhi Proudhyogiki Vishwavidyalaya

Research / Selected Publications:

Rashmi Sahay, G. Geethakumari, Barsha Mitra, *A Novel Network Partitioning Attack against Routing Protocol in Internet of Things*, Ad Hoc Networks, Elsevier, 15 June 2021.

• **Rashmi Sahay**, G. Geethakumari, Barsha Mitra, *A Holistic Framework for Prediction of Routing Attacks in IoT-LLNs*, The Journal of Supercomputing, Springer, 9 June 2021, DOI:10.1007/s11227-021-03922-1.

• **Rashmi Sahay**, G. Geethakumari, Barsha Mitra *A novel blockchain based framework to secure IoT-LLNs against routing attacks*, Computing, Springer, Vol. 102, Issue 11, pp. 2445-70, 25 May 2020.

• V.S.S. Sriram, Rahul Ramadas, **Rashmi Sahay** and Gadadhar Sahoo, "Optimizing elliptic curve domain parameters using genetic algorithms", International Journal of Secure Digital Information Age, Vol. 1, Issue 2, 2009.

• **Rashmi Sahay**, G. Geethakumari, Barsha Mitra, *A Feedforward Neural Network based Model to Predict Sub-optimal Path Attack in IoT-LLNs*, In the Proceedings of the 20th IEEE/ACM International Symposium on Cluster, Cloud and Internet Computing (CCGrid 2020), pp. 400-409, May 2020, Melbourne.

• **Rashmi Sahay**, G. Geethakumari and Barsha Mitra, *Partitioning Attacks against RPL in the Internet of Things Environment*, In the Proceedings of the 26th (Virtual) Annual International Conference on Advanced Computing and Communications (ADCOM 2020), Dec 16-18, 2020, India.

• **Rashmi Sahay**, G. Geethakumari, K Modugu, Barsha Mitra, *Traffic Convergence Detection in IoT LLNs: A Multilayer Perceptron based Mechanism*, In Proceedings of the 9th IEEE Symposium Series in Computational Intelligence, pp. 1715-22, 18-21 November 2018, Bangalore.

• **Rashmi Sahay**, G. Geethakumari, Koushik Modugu, *Attack Graph - based Vulnerability Assessment of Rank Property in RPL 6LOWPAN in IoT*, In Proceedings of the 4th IEEE World Forum on Internet of Things, pp. 308-13, 05-08, February 2018, Singapore.

Book Publication

• Deep, Manisha Kumari, and **Rashmi Sahay**, *Popular Metaheuristic Optimization Techniques*, University Science Press, Laxmi Publications, 2011.

A complete list of my publications can be found at the following link

<https://scholar.google.com/citations?user=uFeSGPEAAAAJ&hl=en>