

Faculty Profile



Name : Dr. Nishtha Jatana
Designation : Assistant Professor
Qualifications : Ph. D (USICT, GGSIPU), M. Tech (DTU, Delhi),
B. Tech (MSIT, GGSIPU)
Phone : 9999453856
Email : nishthajatana@msit.in
Area of Interest/Specialization: Software Testing, Soft Computing techniques, Assistive Technologies
Experience : 12 years

Key Publications

1. Singh, S., Jatana, N., & Goel, V. (2021). HELF (Haptic Encoded Language Framework): a digital script for deaf-blind and visually impaired. *Universal Access in the Information Society*, 1-11.
2. Jatana, N., & Suri, B. (2020). Particle swarm and genetic algorithm applied to mutation testing for test data generation: a comparative evaluation. *Journal of King Saud University-Computer and Information Sciences*, 32(4), 514-521.
3. Jatana, N., & Suri, B. (2020). An improved crow search algorithm for test data generation using search-based mutation testing. *Neural Processing Letters*, 52(1), 767-784.
4. Nishtha, J., Bharti, S., & Shweta, R. (2017). Systematic literature review on search based mutation testing. *e-Informatica Software Engineering Journal*, 11(1).
5. Jatana, N., & Suri, B. (2021). An Empirical Comparison of t-GSC and ACO_TCSP Applied to Time Bound Test Selection. *Recent Advances in Computer Science and Communications (Formerly: Recent Patents on Computer Science)*, 14(2), 555-563.
6. Jatana, N., Puri, S., Ahuja, M., Kathuria, I., & Gosain, D. (2012). A survey and comparison of relational and non-relational database. *International Journal of Engineering Research & Technology*, 1(6), 1-5.

Papers presented in Conferences

1. Wadhwa, D., Singh, N. K., & Jatana, N. (2021). Evaluation of Bernstein Polynomial as a Machine Learning technique. In *IOP Conference Series: Materials Science and Engineering* (Vol. 1022, No. 1, p. 012076). IOP Publishing.
2. Jatana, N., Suri, B., & Kumar, P. (2019). Mutation testing-based test suite reduction inspired from Warshall's algorithm. In *Software Engineering* (pp. 357-364). Springer, Singapore.

3. Jatana, N., Suri, B., Kumar, P., & Wadhwa, B. (2016, March). Test suite reduction by mutation testing mapped to set cover problem. In *Proceedings of the Second International Conference on Information and Communication Technology for Competitive Strategies* (pp. 1-6).
4. Jatana, N., Suri, B., Misra, S., Kumar, P., & Choudhury, A. R. (2016, July). Particle swarm based evolution and generation of test data using mutation testing. In *International Conference on Computational Science and its Applications* (pp. 585-594). Springer, Cham.
5. Jatana, N., & Sharma, K. (2014, March). Bayesian spam classification: Time efficient radix encoded fragmented database approach. In *2014 International Conference on Computing for Sustainable Global Development (INDIACom)* (pp. 939-942). IEEE.

Awards and Recognitions

1. Letter of Appreciation was awarded from the Institution (MSIT) for the year 2013-14 and for the year 2015-16.

Patent/Copyright

1. Communication Assistance system and method of operating the same.
2. Method and Electronic Device for personalizing user activity in virtual reality environment.

Sponsored Project/Consultancy

None

Book Chapter/Books published

1. Spam Classification: Radix Encoded Fragmented Database Approach

Ph.D Supervised : None

Memberships of Professional bodies: None

Other Contributions :

- Convener of IOSD MSIT
- Convener of TECHSOC (Technical Society of MSIT)
- GATE Qualified