

# Full List of Publications

## Journals

- [1] N. Saurabh, C. Rubia, A. Palanisamy, S. Koulouzis, M. Sefidanoski, A. Chakravorty, Z. Zhao, A. Karadimce, and R. Prodan, “The articonf approach to decentralized car-sharing,” *Blockchain: Research and Applications*, p. 100013, 2021.
- [2] N. Karandikar, R. Abhishek, N. Saurabh, Z. Zhao, A. Lercher, N. Marina, R. Prodan, C. Rong, and A. Chakravorty, “Blockchain-based prosumer incentivization for peak mitigation through temporal aggregation and contextual clustering,” *Blockchain: Research and Applications.*, p. 100016., 2021.
- [3] N. Saurabh, S. Benedict, J. G. Barbosa, and R. Prodan, “Expelliarmus: Semantic-centric virtual machine image management in iaas clouds,” *Journal of Parallel and Distributed Computing*, vol. 146, pp. 107–121, 2020.
- [4] E. Torre, J. J. Durillo, V. De Maio, P. Agrawal, S. Benedict, N. Saurabh, and R. Prodan, “A dynamic evolutionary multi-objective virtual machine placement heuristic for cloud data centers,” *Information and Software Technology*, vol. 128, p. 106390, 2020.
- [5] D. Kimovski, A. Marosi, S. Gec, N. Saurabh, A. Kertesz, G. Kecskemeti, V. Stankovski, and R. Prodan, “Distributed environment for efficient virtual machine image management in federated cloud architectures,” *Concurrency and Computation: Practice and Experience*, vol. 30, no. 20, p. e4220, 2018.
- [6] D. Kimovski, N. Saurabh, V. Stankovski, and R. Prodan, “Multi-objective middleware for distributed vmi repositories in federated cloud environment,” *Scalable Computing: Practice and Experience*, vol. 17, no. 4, pp. 299–312, 2016.

## Conferences and Workshops

- [1] Z. N. Samani, N. Saurabh, and R. Prodan, “Multilayer resource-aware partitioning for fog application placement,” in *2021 IEEE 5th International Conference on Fog and Edge Computing (ICFEC)*. IEEE, 2021, pp. 9–18.
- [2] A. Palanisamy, M. Sefidanoski, S. Koulouzis, C. Rubia, N. Saurabh, and R. Prodan, “Decentralized social media applications as a service: a car-sharing perspective,” in *2020 IEEE Symposium on Computers and Communications (ISCC)*. IEEE, 2020, pp. 1–7.
- [3] Z. N. Samani, A. Lercher, N. Saurabh, and R. Prodan, “A semantic model with self-adaptive and autonomous relevant technology for social media applications,” in *European Conference on Parallel Processing*. Springer, 2019, pp. 442–451.
- [4] R. Prodan, N. Saurabh, Z. Zhao, K. Orton-Johnson, A. Chakravorty, A. Karadimce, and A. Ulisses, “Articonf: Towards a smart social media ecosystem in a blockchain federated environment,” in *European Conference on Parallel Processing*. Springer, 2019, pp. 417–428.
- [5] N. Saurabh, J. Remmers, D. Kimovski, R. Prodan, and J. G. Barbosa, “Semantics-aware virtual machine image management in iaas clouds,” in *2019 IEEE International Parallel and Distributed Processing Symposium (IPDPS)*. IEEE, 2019, pp. 418–427.
- [6] D. Kimovski, H. Ijaz, N. Saurabh, and R. Prodan, “Adaptive nature-inspired fog architecture,” in *2018 IEEE 2nd International Conference on Fog and Edge Computing (ICFEC)*. IEEE, 2018, pp. 1–8.
- [7] N. Saurabh, D. Kimovski, F. Gaetano, and R. Prodan, “A two-stage multi-objective optimization of erasure coding in overlay networks,” in *2017 17th IEEE/ACM International Symposium on Cluster, Cloud and Grid Computing (CCGRID)*. IEEE, 2017, pp. 150–159.

- [8] D. Kimovski, **N. Saurabh**, S. Gec, P. Štefanič, G. Kecskemeti, V. Stankovski, R. Prodan, and T. Fahringer, “Towards an environment for efficient and transparent virtual machine operations: The entice approach,” in *2016 5th IEEE International Conference on Cloud Networking (Cloudnet)*. IEEE, 2016, pp. 242–247.
- [9] **N. Saurabh**, D. Kimovski, S. Ostermann, and R. Prodan, “Vm image repository and distribution models for federated clouds: State of the art, possible directions and open issues,” in *European Conference on Parallel Processing*. Springer, 2016, pp. 260–271.
- [10] D. Kimovski, **N. Saurabh**, S. Gec, V. Stankovski, and R. Prodan, “Multi-objective optimization framework for vmi distribution in federated cloud repositories,” in *European Conference on Parallel Processing*. Springer, 2016, pp. 236–247.
- [11] **N. Saurabh**, A. L. Varbanescu, and G. Ranjan, “Computing the pseudo-inverse of a graph’s laplacian using gpu,” in *2015 IEEE International Parallel and Distributed Processing Symposium Workshop*. IEEE, 2015, pp. 265–274.

## Non-reviewed

- [1] **N. Saurabh**, M. Herold, P. Agrawal, A. Chakravorty, A. Pallaniswamy, R. Prodan (2021). Optimised trust management in ARTICONF. ARTICONF Consortium, <http://articonf.eu>, 2021.
- [2] **N. Saurabh**, A. Lercher, R. Prodan (2021). Anonymised trace abstraction and community detection. ARTICONF Consortium, <http://articonf.eu>, 2021.
- [3] R. Prodan, **N. Saurabh**, et al. Final ARTICONF Requirements and Architecture. ARTICONF Consortium, <http://articonf.eu>, 2020.
- [4] **N. Saurabh**, Z. Najafabadi, A. Lercher, B. Mihai, R. Prodan. SMART Framework Design, Conceptualisation, and Human-Agent Role Discovery and Staging Models. ARTICONF Consortium, <http://articonf.eu>, 2020.
- [5] R. Prodan, **N. Saurabh**, et al. ARTICONF Architecture and Interfaces Definition. ARTICONF Consortium, <http://articonf.eu>, 2019.
- [6] A. C. Marosi, G. Kecskemeti, A. Kertesz, A. Hajnal, J. Kovacs, **N. Saurabh**, J. B. Rodríguez, D. González, C. R. R. Marcos, U. Paščinski *et al.*, “Entice optimised vm image synthesis 2. entice consortium, c/o uibk,” 2017.
- [7] D. Kimovski, **N. Saurabh**, and R. Prodan, “Multi-objective optimization framework. entice consortium, c/o uibk,” 2016.
- [8] R. Prodan, S. Ostermann, T. Fahringer, G. Kecskemeti, Z. Nemeth, U. Paščinski, **N. Saurabh**, V. Stankovski, S. Taherizadeh, and J. Trnkoczy, “Entice environment and system architecture design. entice consortium, c/o uibk,” 2015.

## Thesis

- [1] **N.Saurabh**, “On semantics and pareto (inter-) dependencies for resource management in ‘iaas clouds’,” Ph.D. dissertation, University of Innsbruck, June 2021.
- [2] **N. Saurabh**, “Improving the performance of moore-penrose pseudo-inverse for a graph’s laplacian using gpu,” Master’s thesis, Vrije University, 2014.

## Posters, Demos, Invited talks

- [1] **N. Saurabh.** Resource Sprawl Management In ‘Cloud-to-Thing Continuum’, invited talk at *University of Amsterdam (UvA), SNE Cluster meeting*, 2021.
- [2] **N. Saurabh.** On Semantics and Pareto (Inter-) Dependencies for Resource Management In ‘Cloud-to-Thing Continuum’, invited talk at *Ericsson US, GAIA Share and Learn Session*, 2021.
- [3] **N. Saurabh.** ARTICONF approach to decentralised energy marketplace, invited talk at *XXVIII Energy cluster meeting, University of Klagenfurt*, 2020.
- [4] **N. Saurabh.** Towards a semantic-centric VMI repository management, poster presentation, *PhD Forum, IEEE IPDPS 2019*.
- [5] **N. Saurabh,** R. Prodan. ENTICE Demonstration, *Cloud Forward*, 2016.