

File S1. – Literature review database: list of references searched in the Web of ScienceTM and Scopus online platforms using key words and Boolean search criteria

- 2016 International Symposium on Networks, Computers and Communications, ISNCC 2016.
 41st International IT Capacity and Performance Conference (2015).
 Ahearne, S., Vrbishchuk, Y., Sreenan, C., Gunning, F. (2018). Software Defined Control of Tunable Optical Transceivers Using NETCONF and YANG. 2018 European Conference on Networks and Communications, EuCNC 2018 8443188, pp. 81-86.
 Al-Mai, N., Najem, N., Al-Shammari, R., Leeri, A., Robert, H., Divakaran, D., Farid, A., Johnston, B., Arzhilovskiy, S. (2017). How private cloud solution go beyond the conventional infrastructure solution for jurassic Kuwait digital integrated field. Society of Petroleum Engineers - SPE Kuwait Oil and Gas Show and Conference 2017.
 Arya, D., Dave, M. (2017). Security-based service broker policy for FOG computing environment. 8th International Conference on Computing, Communications and Networking Technologies, ICCCNT 2017 8204036.
 Aslam, M., Gehrmann, C. (2011). Security considerations for virtual platform provisioning. 10th European Conference on Information Warfare and Security 2011, ECIW 2011 pp. 283-290.
 Basak, D., Toshniwal, R., Maskalik, S., Sequeira, A. (2010). Virtualizing networking and security in the cloud. Operating Systems Review (ACM) 44(4), pp. 86-94.
 Bedell-Pearce, J. (2018). Safe digital transformation for SMEs. Network Security 2018(11), pp. 6-7.
Benz, S., De Sousa, L.P., Pedone, F. (2016) Stretching Multi-Ring Paxos. Proceedings of the ACM Symposium on Applied Computing 04-08-April-2016, pp. 492-499.
 Binsfeld, N., Whalley, J., Pugalis, L. (2017). Looking beyond official success measures: Tales from the field of the complex forces shaping Luxembourg's ICT eco system. Journal of Innovation Management 5(2), pp. 15-25.
 Boutros, A., Hall, M., Papernot, N., Betz, V. (2020). Neighbors from Hell: Voltage Attacks against Deep Learning Accelerators on Multi-Tenant FPGAs. Proceedings - 2020 International Conference on Field-Programmable Technology, ICFPT 2020 9415613, pp. 103-111.
 Butt, U.A., Mehmood, M., Shah, S.B.H., Amin, R., Waqas Shaukat, M., Raza, S.M., Suh, D.Y., Piran, M.J. (2020). A review of machine learning algorithms for cloud computing security. Electronics (Switzerland) 9(9),1379, pp. 1-25.
 Cai, Z., Li, W., Zhu, W., Liu, L., Yang, B. (2019). A Real-Time Trace-Level Root-Cause Diagnosis System in Alibaba Datacenters. IEEE Access 7,8852648, pp. 142692-142702.
Ceballos, J., Dipasquale, R., Feldman, R. (2012). Business continuity and security in datacenter interconnection. Bell Labs Technical Journal 17(3), pp. 147-155.
 Cho, J.-I., Park, K., Kim, T.Y., Jeon, H., Lee, W., Kim, H. (2015). A fault tolerant channel allocation scheme in distributed cloud networks. Cluster Computing 18(4), pp. 1423-1433.
 Covington, M.J., Carskadden, R. (2013). Threat Implications of the Internet of Things
Das, S., Panda, K.G., Sen, D., Arif, W. (2021). Maximizing Last-Minute Backup in Endangered Time-Varying Inter-Datacenter Networks. IEEE/ACM Transactions on Networking 29(6), pp. 2646-2663.
 Deka, P.K., Bhuyan, M.H., Kadobayashi, Y., Elmroth, E. (2019). Adversarial impact on anomaly detection in cloud datacenters. Proceedings of IEEE Pacific Rim International Symposium on Dependable Computing, PRDC 2019-December,8952139, pp. 188-197.
 DRCN 2017 - 13th International Conference on Design of Reliable Communication Networks (2017).
Economics of Grids, Clouds, Systems, and Services - 8th International Workshop, GECON 2011, Revised Selected Papers (2012)
 Faccioni, M. (2016). Complex Systems: Risk Model Based on Social Network Analysis. IEEE International Symposium on Industrial Electronics 2016-November,7744859, pp. 22-27.
 Ferdousi, S., Dikbiyik, F., Habib, M.F., Tornatore, M., Mukherjee, B. (2015). Disaster-aware datacenter placement and dynamic content management in cloud networks. Journal of Optical Communications and Networking 7(7), pp. 681-694.
 Ferreira, F.R., De Paula, G.C., De Carvalho, R.J.V., Ribeiro-Barbosa, E.R., Spini, V.B.M.G. (2020). Impact of Season of Birth on Psychiatric Disorder Susceptibility and Drug Abuse Incidence in a Population from the Köppen Tropical Savanna Region of Brazil. Neuropsychobiology 79(2), pp. 131-140.
Gomes, R., Lapo, L.V. (2008). The adoption of IT security standards in a healthcare environment. Studies in Health Technology and Informatics 136, pp. 765-770.
 Gómez, C.E., Chavarriaga, J., Tchernykh, A., Castro, H.E. (2020). Improving Reliability for Provisioning of Virtual Machines in Desktop Clouds. Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics) 11997 LNCS, pp. 669-680.
 Gupta, R., Aggarwal, M., Ahuja, S. (2022). Preservation of shared backup path in k-node content based elastic optical datacenter networks. Transactions on Emerging Telecommunications Technologies 33(1),e4378.
 Gusat, M., Birke, R., Minkenberg, C. (2009). Delay-based cloud congestion control. GLOBECOM - IEEE Global

Telecommunications Conference 5425643.

INTELEC, International Telecommunications Energy Conference (Proceedings) (2017).

Jeyanthi, N., Iyengar, N.C.S.N., Kumar, P.C.M., Kannammal, A. (2013). An enhanced entropy approach to detect and prevent DDOS in cloud environment. *International Journal of Communication Networks and Information Security* 5(2), pp. 110-119.

Jha, P., Sharma, A. (2021). Framework to Analyze Malicious Behaviour in Cloud Environment using Machine Learning Techniques. 2021 International Conference on Computer Communication and Informatics, ICCCI 2021 9402671.

Karthik, S., Shah, J.J. (2015) Analysis of simulation of DDOS attack in cloud. 2014 International Conference on Information Communication and Embedded Systems, ICICES 2014 7033841.

Lan, T., Wo, T., Liu, Y., Luo, Y., Shao, L. (2020). A cost-efficient and low-latency data hosting scheme in jointcloud storage. *Proceedings - 2020 IEEE International Conference on Joint Cloud Computing, JCC 2020* 9183439, pp. 13-20.

Laurenzano, M.A., Zhang, Y., Tang, L., Mars, J. (2015). Protean Code: Achieving Near-Free Online Code Transformations for Warehouse Scale Computers. *Proceedings of the Annual International Symposium on Microarchitecture, MICRO 2015-January(January)*, 7011417, pp. 558-570.

Lenkala, S.R., Shetty, S., Xiong, K. (2013). Security risk assessment of cloud carrier. *Proceedings - 13th IEEE/ACM International Symposium on Cluster, Cloud, and Grid Computing, CCGrid 2013* 6546124, pp. 442-449.

Li, H.-C., Liang, P.-H., Yang, J.-M., Chen, S.-J. (2010). Analysis on cloud-based security vulnerability assessment. *Proceedings - IEEE International Conference on E-Business Engineering, ICEBE 2010* 5704304, pp. 490-494.

Li, X., Wang, H., Yi, S., Liu, S., Zhai, L., Jiang, C. (2019). Disaster-and-Evacuation-Aware Backup Datacenter Placement Based on Multi-Objective Optimization. IEEE Access 7,6287639, pp. 48196-48208.

Liu, Y., Zhou, F., Chen, C., Zhu, Z., Shang, T., Torres-Moreno, J.-M. (2021). Disaster Protection in Inter-DataCenter Networks Leveraging Cooperative Storage. *IEEE Transactions on Network and Service Management* 18(3), 9459187, pp. 2598-2611.

Liu, Y., Zhou, F., Shang, T., Torres-Moreno, J.-M. (2022). Power-efficient and Distance-adaptive Disaster Protection for Service Function Chain Provisioning. 2022 IEEE Global Communications Conference, GLOBECOM 2022 – Proceedings pp. 4407-4412.

Mi, X., Feng, X., Liao, X., Liu, B., Wang, X., Qian, F., Li, Z., Alrwais, S., Sun, L., Liu, Y. (2019). Resident evil: Understanding residential IP proxy as a dark service. *Proceedings - IEEE Symposium on Security and Privacy 2019-May*, 8835239, pp. 1185-1201.

Mishra, S., Sangaiah, A.K., Sahoo, M.N., Bakshi, S. (2019). Pareto-optimal cost optimization for large scale cloud systems using joint allocation of resources. *Journal of Ambient Intelligence and Humanized Computing* (Article in Press).

Morshed, A., Jayaraman, P.P., Sellis, T., Georgakopoulos, D., Villari, M., Ranjan, R. (2017). Deep Osmosis: Holistic Distributed Deep Learning in Osmotic Computing. *IEEE Cloud Computing* 4(6), 8260823, pp. 22-32.

Proceedings - 2012 4th International Conference on Multimedia and Security, MINES 2012.

Proceedings - 2013 11th International Symposium on Autonomous Decentralized Systems, ISADS 2013.

Proceedings - 2016 IEEE Symposium on Service-Oriented System Engineering, SOSE 2016.

Proceedings of the 2016 12th International Conference on the Design of Reliable Communication Networks, DRCN 2016

Puthal, D., Nepal, S., Ranjan, R., Chen, J. Threats to Networking Cloud and Edge Datacenters in the Internet of Things. ACM Transactions on Cyber-Physical Systems 4(3), 3351882.

Puthal, D., Yang, L.T., Dustdar, S., Wen, Z., Jun, S., Moorsel, A.V., Ranjan, R. (2020). A User-centric Security Solution for Internet of Things and Edge Convergence. *IEEE Cloud Computing* 3(3), 7503493, pp. 64-71.

Ranjan, R., Garg, S., Khoskbar, A.R., Solaiman, E., James, P., Georgakopoulos, D. (2017). Orchestrating BigData Analysis Workflows. *IEEE Cloud Computing* 4(3), 7962130, pp. 20-28.

Sabur, A., Chowdhary, A., Huang, D., Kang, M., Kim, A., Velazquez, A. (2019). S3: A DFW-based scalable security state analysis framework for large-scale data center networks. *RAID 2019 Proceedings - 22nd International Symposium on Research in Attacks, Intrusions and Defenses* pp. 473-485.

Sengole Merlin, S., Arunkumar, N.M., Angela, M.A. (2018). Automated Intelligent Systems for Secure Live Migration. *Proceedings of the International Conference on Inventive Communication and Computational Technologies, ICICCT 2018* 8472988, pp. 1360-1371.

Sengupta S., K.M. Annerva (2014), Multi-site data distribution for disaster recovery—A planning framework, Future Generation Computer Systems Volume 41, December 2014, 53-64.

Sharma, A., Jha, P., Singh, S. (2021). Data control in public cloud computing: Issues and challenges. Recent Advances in Computer Science and Communications 14(2), pp. 564-579.

Sharma, R., Shih, R., Patel, C., Sontag, J. (2007). Application of exploratory data analysis (EDA) techniques to temperature data in a conventional data center. 2007 *Proceedings of the ASME InterPack Conference, IPACK 2007*

1, pp. 851-857

- Shumailov, I., Zhao, Y., Bates, D., Papernot, N., Mullins, R., Anderson, R. (2021). Sponge examples: Energy-latency attacks on neural networks. *Proceedings - 2021 IEEE European Symposium on Security and Privacy, Euro S and P 2021*, pp. 212-231.
- Sovacool, B.K., Upham, P., Monyei, C.G. (2022). The “whole systems” energy sustainability of digitalization: Humanizing the community risks and benefits of Nordic datacenter development. *Energy Research and Social Science* 88.
- Tang, L., Mars, J., Wang, W., Dey, T., Soffa, M.L. (2013). ReQoS: Reactive static/dynamic compilation for QoS in warehouse scale computers. *International Conference on Architectural Support for Programming Languages and Operating Systems – ASPLOS* pp. 89-100.
- Tang, Z., Zhou, H., Zhu, Y., Tian, R., Yao, J. (2017). Quantitative Availability Analysis of Hierarchical Datacenter under Power Oversubscription. *2017 IEEE International Conference on Smart Computing, SMARTCOMP 2017* 7947039.
- Tomás, L., Kokkinos, P., Anagnostopoulos, V., Feder, O., Kyriazis, D., Meth, K., Varvarigos, E., Varvarigou, T. (2020). Disaster Recovery Layer for Distributed OpenStack Deployments. *IEEE Transactions on Cloud Computing* 8(1),8017473, pp. 112-123.
- Tuma, P., Schulz, J., Bonk, J., Roy, R., DeLorme, M., Logan, P. (2018). An exposure assessment approach for potential thermal degradation compounds in 2-phase immersion cooling operations. *Process Safety Progress* 37(3), pp. 369-375.
- Vaquero, L.M., Rodero-Merino, L., Morán, D. (2011). Locking the sky: A survey on IaaS cloud security. *Computing (Vienna/New York)* 91(1), pp. 93-118.
- Vijaya Chandra, J., Challa, N., Pasupuletti, S.K. (2019). Authentication and authorization mechanism for cloud security. *International Journal of Engineering and Advanced Technology* 8(6), pp. 2072-2078.
- Viswanathan, H., Lee, E.K., Rodero, I., Pompili, D. (2015). Uncertainty-Aware Autonomic Resource Provisioning for Mobile Cloud Computing. *IEEE Transactions on Parallel and Distributed Systems* 26(8),6869019, pp. 2363-2372.
- Wahab, O.A., Bentahar, J., Otrok, H., Mourad, A. (2021).Resource-Aware Detection and Defense System against Multi-Type Attacks in the Cloud: Repeated Bayesian Stackelberg Game. *IEEE Transactions on Dependable and Secure Computing* 18(2),8675527, pp. 605-622.
- Wright, E., Chen, J.T., Beckfield, J., Theodore, N., González, P.L., Krieger, N. (2022). A Novel Use of Latent Class Analysis to Identify Patterns of Workplace Hazards among Informally Employed Domestic Workers in 14 Cities, United States, 2011-2012. *Annals of Work Exposures and Health* 66(7), pp. 838-862.
- Yang C. L., B. J. C. Yuan, C-Y. Huang (2015) Key Determinant Derivations for Information Technology Disaster Recovery Site Selection by the Multi-Criterion Decision Making Method, Sustainability 2015, 7, 6149-6188**