

## PUBLICATIONS

Associate prof. Mika Ylianttila, University of Oulu, Finland

### Articles in international peer-reviewed journals (64)

1. T. Hewa, P. Porambage, I. Kovacevic, N. Weerasinghe, E. Harjula, M. Liyanage, M. Ylianttila, "Blockchain-based Network Slice Broker to Facilitate Factory-as-a-Service", accepted to IEEE Transactions on Industrial Informatics, 2022. (Impact factor 10.215, JuFo 3)
2. T. Hewa, A. Braeken, M. Liyanage, M. Ylianttila, "Fog Computing and Blockchain based Security Service Architecture for 5G Industrial IoT enabled Cloud Manufacturing", accepted to IEEE Transactions on Industrial Informatics, 2022. (Impact factor 10.215, JuFo 3)
3. T. Hewa, P. Porambage, A. Kalla, D. P. M. Osorio, M. Liyanage, M. Ylianttila, "Blockchain and Game Theory Convergence for Network Slice Brokering", accepted to IEEE Computer Magazine, 2022. (Impact factor 2.683, JuFo 2)
4. J. Okwuibe, J. Haavisto, I. Kovacevic, E. Harjula, I. Ahmad, J. Islam, M. Ylianttila, "SDN-Enabled Resource Orchestration for Industrial IoT in Collaborative Edge-Cloud Networks", accepted to IEEE Access, 2021. (Impact factor 4.098, JuFo 2)
5. P. Porambage, G. Gur, D. Osorio, M. Liyanage, A. Gurtov, M. Ylianttila, "The Roadmap to 6G Security and Privacy", accepted to IEEE Open Journal of the Communications Society, 2021. (JuFo 1)
6. I. Kovacevic E. Harjula, S. Glisic, B. Lorenzo, M. Ylianttila, "Cloud and Edge Computation Offloading for Latency Limited Services", accepted to IEEE Access, 2021. (Impact factor 4.098, JuFo 2)
7. M. Ejaz, T. Kumar, I. Kovacevic, M. Ylianttila, E. Harjula, "Health-BlockEdge: Blockchain-Edge Framework for Reliable Low-latency Digital Healthcare Applications", accepted to MPDI Sensors, 2021. (Impact factor 3.275, JuFo 1)
8. N. Weerasinghe, T. Hewa, S. Kanhere, M. Liyanage, M. Ylianttila, "A Novel Blockchain-as-a-Service (BaaS) Platform for Local 5G Operators", accepted to IEEE Open Journal of the Communications Society, 2021 (IEEE Open Journal of the Communications Society. (JuFo 1)
9. Y. Siriwardhana, P. Porambage, M. Liyanage, M. Ylianttila, "A Survey on Mobile Augmented Reality with 5G Mobile Edge Computing: Architectures, Applications and Technical Aspects", accepted to IEEE Communications Surveys & Tutorials, 2021. (Impact factor 22.97, JuFo 2)
10. T. Lähderanta, T. Leppänen, L. Ruha, L. Lovén, E. Harjula, M. Ylianttila, J. Riekk, M. Sillanpää, "Edge computing server placement with capacitated location allocation", accepted to Elsevier Journal of parallel and distributed computing, 2021. (Impact factor 2.296, JuFo 2)
11. T. Hewa, Y. Hu, M. Liyanage, S. Kanhare, M. Ylianttila, "Survey on Blockchain based Smart Contracts: Technical Aspects and Future Research", accepted to IEEE Access, 2021. (Impact factor 4.098, JuFo 2)
12. A. Manzoor, M. Liyanage, A. Braeken, S. Kanhere, M. Ylianttila, "Proxy Re-encryption enabled Secure and Anonymous IoT Data Sharing Platform based on Blockchain", to appear in Journal of Network and Computer Applications, Elsevier (Impact factor 5.570, JuFo 1)
13. J. Okwuibe, J. Haavisto, E. Harjula, I. Ahmad, M. Ylianttila, "SDN Enhanced Resource Orchestration of Containerized Edge Applications for Industrial IoT", accepted to IEEE Access, 2020. (Impact factor 4.098, JuFo 2)
14. I. Ahmad, S. Shahabuddin, H. Malik, E. Harjula, T. Leppänen, L. Lovén, A. Anttonen, A. Sodhro, M. Alam, M. Juntti, A. Ylä-Jääski, T. Sauter, A. Gurtov, M. Ylianttila, J. Riekk,

- "Machine Learning Meets Communication Networks: Current Trends and Future Challenges", accepted to IEEE Access, 2020. (Impact factor 4.098, JuFo 2)
15. A. Manzoor, M. Samarin, D. Mason, M. Ylianttila, "Scavenger Hunt: Utilization of Blockchain and IoT for a location-based Game" in IEEE Access, 2020. (Impact factor 4.098, JuFo 2)
  16. T. Kumar, E. Harjula, M. Ejaz, A. Manzoor, P. Porombage, I. Ahmad, M. Liyanage, A. Braeken, M. Ylianttila, "BlockEdge: Blockchain-Edge Framework for Industrial IoT Networks," in IEEE Access, vol. 8, pp. 154166-154185, 2020. (Impact factor 4.098, JuFo 2)
  17. Y. Siriwardhana, P. Porombage, M. Ylianttila, M. Liyanage, "Performance Analysis of Local 5G Operator Architectures for Industrial Internet", accepted to IEEE Internet of Things Journal, 2020. (Impact Factor 9.936, JuFo 2)
  18. I. Ahmad, S. Shahabuddin, T. Kumar, E. Harjula, M. Meisel, M. Juntti, T. Sauter & M. Ylianttila (2020). "Challenges of AI in Wireless Networks for IoT", accepted to IEEE Industrial Electronics Magazine, 2020. (Impact factor 10.71, JuFo 2)
  19. T. Hewa, M. Ylianttila, M. Liyanage, "Survey on Blockchain based Smart Contracts: Applications, Opportunities and Challenges", Journal of Network and Computer Applications, Elsevier, 2020 . (Impact factor: 5.570, JuFo 1)
  20. Y. Siriwardhana, C. de Alwis, Gurkan Gur, M. Ylianttila, M. Liyanage, "The Fight against the COVID-19 Pandemic with 5G Technologies", IEEE Engineering Management Review, 2020, (Impact factor 0.39, JuFo 1).
  21. A. Kalla, T. Hewa, R. Mishra, M. Ylianttila, M. Liyanage, "The Role of Blockchain to Fight Against COVID-19", accepted to IEEE Engineering Management Review, 2020, Impact factor 0.39, JuFo 1)
  22. Y. Siriwardhana, G. Gur, M. Ylianttila, M. Liyanage, "The Role of 5G for Digital Healthcare against COVID-19 Pandemic: Opportunities and Challenges" in Elsevier ICT Express Journal, 2020 (Impact Factor: 2.950)
  23. E. Harjula, P. Karhula, J. Islam, T. Leppänen, A. Manzoor, M. Liyanage, C. Jagmohan, T. Kumar, I. Ahmad, M. Ylianttila, "Decentralized IoT Edge Nanoservice Architecture for Future Gadget-Free Computing", IEEE Access, July 2019. (Impact factor 4.098, JuFo 2)
  24. I. Ahmad, S. Shahabuddin, T. Kumar, J. Okwuibe, A. Gurtov and M. Ylianttila, "Security for 5G and Beyond," in IEEE Communications Surveys & Tutorials, 2019. (Impact factor 22.97, JuFo 2)
  25. T. Kumar, A. Braeken, A. Jurcut, M. Liyanage, M., Ylianttila, "AGE: Authentication in Gadget-Free Healthcare Environments, Information Technology and Management", (In Press), 2019. (Impact factor 1.28, JuFo 2)
  26. P. Porombage, J. Okwuibe, M. Liyanage, M. Ylianttila, T. Taleb, "Survey on Multi-Access Edge Computing for Internet of Things Realization", to appear in the IEEE Communications Surveys & Tutorials, 2018. (Impact factor 17.188)
  27. T. Kumar, P. Porombage, I. Ahmad, M. Liyanage, E. Harjula, M. Ylianttila. "Securing the Gadget-Free Digital Services", IEEE Computer 51 (11), 66-77, 2018. (Impact factor 1.755)
  28. I. Ahmad, T. Kumar, J. Okwuibe, M. Liyanage, M. Ylianttila, A. Gurtov, "Overview of 5G Security Challenges and Solutions", IEEE Communications Standards Magazine, Vol.2, Issue 1, pp. 36-43, 2018.
  29. T. Mekonnen, M. Komu, R. Morabito, R., T. Kauppinen, E. Harjula, T. Koskela and M. Ylianttila. "Energy Consumption Analysis of Edge Orchestrated Virtualized Wireless Multimedia Sensor Networks". IEEE Access, Vol.6, pp. 5090 – 5100, 2017. (Impact factor 3.244)
  30. I. Ahmad, T. Kumar, M Liyanage, M. Ylianttila, T. Koskela, T. Braysy, A. Anttonen, V. Pentikainen Vesa, J-P Soininen, J. Huusko, "Towards Gadget-Free Internet Services: A Roadmap of the Naked World", to appear in Telematics and Informatics Journal, Elsevier, 2017. (Impact factor 3.398)
  31. T. Mekonnen, P. Porombage, E. Harjula E, M. Ylianttila M, "Energy consumption

- analysis of a Full HD Multi-tier Wireless Multimedia Sensor Network", *IEEE Access* 5: 15848-15858, 2017. (Impact factor 3.244)
32. P. Porombage, A. Braeken, P. Kumar, A. Gurtov, M. Ylianttila, "CHIP: Collaborative Host Identity Protocol with Efficient Key Establishment for Constrained Devices in Internet of Things", *Wireless Personal Communications*, Volume 96, Issue 1, pp 421-440, September 2017. (Impact factor 0.951)
  33. M. Liyanage, I. Ahmed, J. Okwuibe, M. Ylianttila, H. Kabir, J. Santos, R. Kantola, O. Perez, M. Itzazelaia, E. Montes de Oca, "Enhancing Security of Future Software Defined Mobile Networks", *IEEE Access*, Vol. 5, pp. 9422-9438, 2017. (Impact factor 3.244)
  34. M. Liyanage, A. Braeken, A. Jurcut, M. Ylianttila, A. Gurtov, "Secure Communication Channel Architecture for Software Defined Mobile Networks", *Elsevier Computer Networks*, Vol. 114, pp. 32-50, 2017. (Impact factor 2.516)
  35. E. Harjula, A. Gurtov, T. Koskela, T. Ojala, M. Ylianttila, "Energy-Aware Load Monitoring for Improving Battery Life of Mobile Peer-to-Peer Nodes", *Elsevier Sustainable Computing: Informatics and Systems*, Volume 12, December 2016, Pages 43-54, doi: 10.1016/j.suscom.2016.09.002. (Impact factor 1.800)
  36. M. Liyanage, P. Kumar, M. Ylianttila, A. Gurtov, "Novel Secure VPN Architectures for LTE Backhaul Networks", *Security and Communication Networks- Wiley Online Library*, 2016. (Impact factor 1.067)
  37. M. Liyanage, A. Bux Abro, M. Ylianttila, A. Gurtov, "Opportunities and Challenges of Software-Defined Mobile Networks in Network Security Perspective", *IEEE Security and Privacy*, pp 34-44, July/August 2016. (Impact factor 1.382)
  38. P. Porombage, C. Schmitt, P. Kumar, A. Gurtov, M. Ylianttila, A. Vasilakos, "The Quest for Privacy in Internet of Things Solutions and Future Research Directions: A Holistic Perspective", in *IEEE Cloud Computing*, Vol.3, Issue 2, pp. 36-45, March/April 2016.
  39. I. Ahmad, S. Namal, M. Ylianttila, A. Gurtov, "Security in Software Defined Networks: A Survey," *IEEE Communications Surveys and Tutorials*, Vol. 17, issue 4, pp. 2317-2346, 2015. (Impact factor 17.188)
  40. A. Braeken, P. Porombage, A. Gurtov, M. Ylianttila, "Secure and Efficient Reactive Video Surveillance for Patient Monitoring", *MDPI Sensors*, 16(1), January 2016. (Impact factor 2.677)
  41. P. Porombage, A. Braeken, M. Carlier, P. Kumar, A. Gurtov, M. Ylianttila, "Secure and Efficient Automatic Ruling in Three-Level Network Architecture", *Advances in Intelligent Systems and Computing*, vol 399, pp 185-194, 2016.
  42. P. Kumar, A. Gurtov, J. Linatti, M. Ylianttila, and M. Sain, "Lightweight and Secure Session-Key Establishment Scheme in Smart Home Environments", *IEEE Sensors*, Volume: 16, Issue: 1, pp. 254-264 Jan.1, 2016. (Impact factor 2.512)
  43. M. Liyanage, M. Ylianttila, A. Gurtov, "Secure Hierarchical VPLS Architecture for Provider Provisioned Networks", *IEEE Access*, Volume: 3, pp. 967-984, 2015. (Impact factor 3.244)
  44. P. Porombage, A. Braeken, C. Schmitt, A. Gurtov, M. Ylianttila, B. Stiller, Group Key Establishment for Enabling Secure Multicast Communication in Wireless Sensor Networks Deployed for IoT Applications, *IEEE Access*, vol 3, pages 1503-1511, September 2015. (Impact factor 3.244)
  45. P. Porombage, C. Schmitt, P. Kumar, A. Gurtov, M. Ylianttila, "PAuthKey: A Pervasive Authentication Protocol and Key Establishment Scheme for Wireless Sensor Networks in Distributed IoT Applications," *PAuthKey: A Pervasive Authentication Protocol and Key Establishment Scheme for Wireless Sensor Networks in Distributed IoT Applications*, *International Journal of Distributed Sensor Networks*, Vol. 10, issue: 7, Article ID 357430, 14 pages, 2014. (Impact factor: 1.239)
  46. P. Kumar, M. Ylianttila, A. Gurtov, S-G Lee and H-J. Lee, "An Efficient and Adaptive Mutual Authentication Framework for Heterogeneous Wireless Sensor Network-Based Applications", *Sensors* 2014, 14(2), 2732-2755; doi:10.3390/s140202732
  47. P. Kumar, A. Gurtov, M. Ylianttila, S-G Lee and H-J. Lee, "A Strong Authentication

- Scheme with User Privacy for Wireless Sensor Networks", ETRI Journal, vol.35, No. 5, October 2013, pp. 889-899. (Impact factor: 1.116)
48. M. Liu, E. Harjula, M. Ylianttila, "An efficient selection algorithm for building a super-peer overlay, Journal of Internet Services and Applications, 4(1), 1-12, 2013, <http://dx.doi.org/10.1186/1869-0238-4-4> [dx.doi.org]
  49. T. Koskela, O. Kassinen, E. Harjula, M. Ylianttila, "P2P Group Management Systems: A Conceptual Analysis", ACM Computing Surveys [Impact factor 7.806], Volume 45 Issue 2, February 2013, Article No. 20.
  50. Zhou, J., Sun, J, Athukorala, K., Wijekoon, D., Ylianttila, M. (2012). Pervasive Social Computing: Augmenting Five Facets of Human Intelligence. Journal of Ambient Intelligence and Humanized Computing, vol. 3, iss. 2, 153-166.
  51. Zhou, J. Ylianttila, M. and Riekk, J. (2012). CADSC: a Cloud-based architecture for dynamic service composition. International Journal of Grid and High Performance Computing, vol. 4, iss. 2, 17-31.
  52. M. Liu, T. Koskela, J. Zhou, J. Riekk, M. Ylianttila, "Super-Peer-based Coordinated Service Provision", The Journal of Network and Computer Applications, Elsevier, ISSN: 1084-8045, [Impact factor 0.945], Volume 34 Issue 4, pp. 1210-1224, July, 2011.
  53. J. Zhou, E. Gilman, J. Palola, J. Riekk, M. Ylianttila, J. Sun, "Context-aware pervasive service composition and its implementation", Personal and Ubiquitous Computing journal, Springer-Verlag, ISSN:1617-4909, Volume 15, Number 3, March 2011 (Published online: 10 August 2010), pp. 291-303. [Impact factor 1.554]
  54. O. Kassinen, E. Harjula, T. Koskela, M. Ylianttila, "Guidelines for the Implementation of Cross-platform Mobile Middleware", International Journal of Software Engineering and Its Applications (IJSEIA) 4(3):43-57, 2010.
  55. T. Koskela, O. Kassinen, E. Harjula, J. Pellikka, M. Ylianttila, "Case Study on a Community-Centric Mobile Service Environment", International Journal of Web Applications 2(3): 187-206, 2010.
  56. Z. Ou, E. Harjula, O. Kassinen, M. Ylianttila, "Performance Evaluation of a Kademia-based Communication-oriented P2P System under Churn", Elsevier Journal of Computer Networks, The International Journal of Computer and Telecommunications Networking, ISSN: 1389-1286, Vol 54 (5): 689-705. [Impact factor 1.176], 2010.
  57. T. Koskela, J. Julkunen, O. Kassinen, M. Ylianttila, "User Evaluation of a Community-centric Music Voting Service", International Journal of Digital Content Technology and its Applications (JDCTA), ISSN: 1975-9339, Vol 4(1): 69-78, 2010.
  58. J. Zhou, M. Ylianttila, "Digital Movie Guide Service for Approaching Community Coordinated Multimedia", Journal of Intelligent Computing 1(4): 176-182, ISSN: 0976-9005.
  59. T. Koskela, O. Kassinen, Z. Ou, M. Ylianttila, "Improving Community Management Performance with Two-level Hierarchical DHT Overlays", Journal of Internet Technology, ISSN: 1607-9264, Special Issue on Internet resource discovery and sharing, Vol 11(2): 167-181, 2010 [Impact factor 0.448]
  60. Z. Ou, E. Harjula, T. Koskela, M. Ylianttila, "GTPP: General Truncated Pyramid Peer-to-Peer Architecture over Structured DHT Networks", ACM/Springer Mobile Networks and Applications (MONET), ISSN: 1383-469X, Springer, 2009 [Impact factor 1.619]
  61. O. Kassinen, T. Koskela, E. Harjula, J. Riekk, M. Ylianttila, "Analysis of Connectivity and Session Management for Mobile Peer-to-Peer Applications", Journal of Mobile Multimedia, ISSN: 1550-4646, Vol.5, No.1 (2009), pp.81-112.
  62. J. Zhou, Z. Ou, M. Rautiainen, T. Koskela, M. Ylianttila, "Digital Television for Mobile Devices", IEEE Multimedia, ISSN: 1070-986X, Vol.16., No.1 (2009), pp.60-71. [Impact factor 2.258]
  63. M. Ylianttila, J., Mäkelä K. Pahlavan, "Analysis of Handoff in a Location-Aware Vertical Multi-Access Network", Elsevier Journal on Computer Networks, Special Issue on Wireless IP Through Integration of Wireless LAN and Cellular Networks, ISSN: 1389-1286, Vol. 47/2, 2005, pp. 185-201. [Impact factor 1.176]

64. K. Pahlavan, P. Krishnamurthy, A. Hatami, M. Ylianttila, J. Mäkelä R. Pichna, J. Vallström, "Handoff in Hybrid Mobile Data Networks", IEEE Personal Communications Magazine (currently IEEE Wireless Communications), ISSN: 1070-9916, Vol.7 No.2, April 2000, pp. 34-47. [Impact factor 3.180]

### Articles in international peer-reviewed conference proceedings (150)

1. Y. Siriwardhana, P. Porambage, M. Liyanage, M. Ylianttila, "Robust and Resilient Federated Learning for Securing Future Networks", accepted to EuCNC & 6G Summit, June 2022.
2. S. Jayasinghe, Y. Siriwardhana, P. Porambage, M. Liyanage, M. Ylianttila, "Federated Learning Based Anomaly Detection as an Enabler for Securing Network and Service Management Automation in Beyond 5G Networks", accepted to EuCNC & 6G Summit, June 2022.
3. T. Hewa, N. Weerasinghe, P. Porambage, M. Liyanage, M. Ylianttila, "Demo: Blockchain-based Secured and Federated Slice Broker (SFSBroker)", accepted to NOMS2022, April 2022.
4. T. Kumar, M. Ylianttila, E. Harjula, "Securing Edge Services for Future Smart Healthcare and Industrial IoT Applications", NOMS2022, April 2022.
5. R. De Silva, Y. Siriwardhana, T. Samarasinghe, M. Liyanage, M. Ylianttila, "Deployment Options of 5G Network Slicing for Smart Healthcare", 2022 IEEE 19th Annual Consumer Communications & Networking Conference (CCNC), 2022.
6. T. Hewa, A. Kalla, P. Porambage, M. Liyanage, M. Ylianttila, "How DoS Attacks Can Be Mounted on Network Slice Broker and Can They Be Mitigated Using Blockchain?", accepted to in 2021 IEEE 32nd Annual International Symposium on Personal, Indoor and Mobile Radio Communications (PIMRC), 13-16 September 2021.
7. Y. Siriwardhana, P. Porambage, M. Liyanage, M. Ylianttila, "AI and 6G Security: Opportunities and Challenges", accepted to 2021 EuCNC & 6G Summit.
8. P. Porambage, G. Gur, D. Osorio, M. Liyanage, M. Ylianttila, "6G Security Challenges and Potential Solutions", accepted to 2021 EuCNC & 6G Summit.
9. T. Hewa, N. Weerasinghe, P. Porambage, A. Kalla, G. Xilouris, M. Christopoulou, M. Liyanage, M. Ylianttila, "SFSBroker: Secure and Federated Network Slice Broker for 5G and Beyond", accepted to 2021 EuCNC & 6G Summit - Posters.
10. N. Weerasinghe, T. Hewa, M. Dissanayake, M. Ylianttila, M. Liyanage, "Blockchain-based Roaming and Offload Service Platform for Local 5G Operators", to appear in IEEE CCNC 2021.
11. Y. Siriwardhana, P. Porambage, M. Liyanage, M. Ylianttila, "Performance Analysis of Softwarized Local Mobile Networks", to appear in the Poster track of IEEE CCNC 2021.
12. T. Hewa, A. Braeken, M. Ylianttila, M. Liyanage, "Multi-Access Edge Computing and Blockchain-based Secure Telehealth System Connected with 5G and IoT", accepted to IEEE Global Communications Conference (GlobeCom) December 2020, Taipei, Taiwan.
13. A. Ahmad, E. Harjula, M. Ylianttila, I. Ahmad, "Evaluation of Machine Learning Techniques for Security in SDN", accepted to IEEE GLOBECOM 2020 Workshop on Secure and Dependable Software-defined Networking for Sustainable Smart Communities in Taipei, Taiwan.
14. R. de Silva, Y. Siriwardhana, T. Samarasinghe, M. Ylianttila, M. Liyanage, "Local 5G Operator Architecture for Delay Critical Telehealth Applications", accepted to 2020 IEEE 5G World Forum (5GWF), Bangalore, India, September 2020.
15. T. Hewa, A. Braeken, M. Ylianttila, M. Liyanage, "Blockchain-based Automated Certificate Revocation for 5G IoT ", to appear in IEEE International Conference on Communications (ICC) 2020, Dublin, Ireland, June 2020
16. T. Hewa, G. Gur, A. Kalla, A. Braeken, M. Ylianttila, M. Liyanage, "The Role of Blockchain in 6G: Challenges, Opportunities and Research Directions ", in Proc. 6G Wireless Summit 2020, Levi, Finland, March 2020

17. M. Ejaz, T. Kumar, M. Ylianttila, E. Harjula (2020). "Performance and Efficiency Optimization of Multi-layer IoT Edge Architecture" in Proc. 6G Wireless Summit, Levi, Finland, March 2020.
18. T. Hewa, A. Kalla, A. Nag, M. Ylianttila, M. Liyanage, "Blockchain for 5G and IoT: Opportunities and Challenges ", to be appeared in The 8th IEEE International Conference on Communications and Networking ( IEEE ComNet'2020), Hammamet, Tunisia, March 2020
19. Arif, O. Liinamaa, I. Ahmad, A. Pouttu, M. Ylianttila, "On the Demonstration and Evaluation of Service-Based Slices in 5G Test Network using NFV", 2019 IEEE Wireless Communications and Networking Conference Workshop (WCNCW), 15-18 April 2019, Marrakech, Morocco. <https://doi.org/10.1109/WCNCW.2019.8902745>.
20. A. Manzoor, M. Liyanage, A. Braeken, S. Kanhere, M. Ylianttila, "Blockchain based proxy re-encryption scheme for secure iot data sharing", Proc. 1st IEEE International Conference on Blockchain and Cryptocurrency, pp. 99-103, ICBC 2019, 14-17 May 2019, Seoul, Korea (South). <https://doi.org/10.1109/BLOC.2019.8751336>
21. H. Malik, A. Manzoor, M. Ylianttila, M. Liyanage, "Performance Analysis of Blockchain based Smart Grids with Ethereum and Hyperledger Implementations ", to appear in 2019 IEEE International Conference on Advanced Networks and Telecommunications Systems (ANTS), Goa, India, December 2019
22. T. Kumar, A. Breaken, V. Ramani, I. Ahmad, E. Harjula & M. Ylianttila (2019). "SEC-BlockEdge: Security Threats for Blockchain-Edge Framework for Industrial IoT Applications," in Proc. IEEE RNDM, Nicosia, Cyprus, October 2019.
23. P. Porombage, Y. Miche, A. Kalliola, M. Liyanage, M. Ylianttila, "Secure Keying Scheme for Network Slicing in 5G Architecture", proceedings of IEEE CSCN, Granada, Spain, October 2019.
24. J. Islam, E. Harjula, T. Kumar, P. Karhula, M. Ylianttila, "Docker Enabled Virtualized Nanoservices for Local IoT Edge Networks", proceedings of IEEE CSCN, Granada, Spain, October 2019.
25. Y. Siriwardhana, P. Porombage, M. Liyanage, J. S. Walia, M. Matinmikko-Blue and M. Ylianttila, "Micro-Operator driven Local 5G Network Architecture for Industrial Internet", IEEE Wireless Communications and Networking Conference (WCNC), April 2019.
26. L. Loven, T. LeppÄrnen, E. Peltonen, J. Partala, E. Harjula, P. Porombage, M. Ylianttila, J. Rieki, "EdgeAI: A Vision for Distributed Edge-native Artificial Intelligence" in Proc. Future 6G Networks, 6G Wireless Summit, March 24-26, Levi, Finland, 2019.
27. L. Loven L, E. Peltonen, T. LeppÄrnen, J. Partala, E. Harjula E, P. Porombage, M. Ylianttila, J. Rieki EdgeAI: A Vision for Distributed Artificial Intelligence on the Edge, in Proc. 10th Nordic Workshop on System and Network Optimization for Wireless (SNOW), April 1-4, Ruka, Finland, 2019.
28. A. Rajakaruna, P. Porombage, A. Manzoor, M. Liyanage, A. Gurtov, M. Ylianttila, "Enabling End-to-End Secure Connectivity for Low-Power IoT Devices with UAVs", 2nd Workshop on Intelligent Computing and Caching at the Network Edge at IEEE Wireless Communications and Networking Conference (WCNC).
29. P. Porombage, A. Manzoor, M. Liyanage, A. Gurtov, M. Ylianttila, "Managing Mobile Relays for Secure E2E Connectivity of Low-Power IoT Devices" 16th IEEE Annual Consumer Communications & Networking Conference (CCNC), 2019.
30. V. Ramani, T. Kumar, A. Bracken, M. Liyanage, M. Ylianttila, "Secure and Efficient Data Accessibility in Blockchain based Healthcare Systems", 2018 IEEE Global Communications Conference (GLOBECOM), pp. 206-212.
31. T. Kumar, V. Ramani, I. Ahmad, A. Braeken, E. Harjula, M. Ylianttila, "Blockchain Utilization in Healthcare: Key Requirements and Challenges", to appear in the Proc. 2018 IEEE 20th International Conference on e-Health Networking, Applications and Services (Healthcom), Ostrava, Czech Republic.
32. M. Liyanage, J. Salo, A. Braeken, T. Kumar, S. Seneviratne, M. Ylianttila, "5G Privacy: Scenarios and Solutions", Accepted in 2018 IEEE 5G World Forum (5GWF), California,

USA, July 2018.

33. A. Manzoor, Y. Hu, M. Liyanage, P. Ekparinya, K. Thilakarathna, G. Jourjon, A. Seneviratne, S. Kanhere, M. Ylianttila, "Demo: A Delay-Tolerant Payment Scheme on the Ethereum Blockchain", Accepted in IEEE 18th International Symposium on "A World of Wireless, Mobile and Multimedia Networks" (WoWMoM) , Chania, Greece, June 2018.
34. A. Manzoor , P. Porambage, M. Liyanage, M. Ylianttila, A. Gurtov, "DEMO: Mobile Relay Architecture for Low-Power IoT Devices", Accepted in IEEE 18th International Symposium on "A World of Wireless, Mobile and Multimedia Networks" (WoWMoM) , Chania, Greece, June 2018.
35. M. Liyanage, M. Ylianttila, A. Gurtov, "Software Defined VPLS Architectures: Opportunities and Challenges", in IEEE 28th Annual International Symposium on Personal, Indoor, and Mobile Radio Communications (PIMRC 2017), Montreal, Canada , October 2017
36. I. Ahmad, T. Kumar, M. Liyanage, J. Okwuibe, M. Ylianttila, A. Gurtov, "5G Security: Analysis of Threats and Solutions", the 2017 IEEE Conference on Standards for Communications and Networking (CSCN), Helsinki, Finland, September 2017 (Best paper award)
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