

S. B. Nath, H. Gupta, S. Chakraborty and S. K. Ghos: "A Survey of Fog Computing and Communication: Current Researches and Future Directions"

IEEE Communication Surveys and Tutorials, April 2018

[https://www.researchgate.net/publication/324492557\\_A\\_Survey\\_of\\_Fog\\_Computing\\_and\\_Communication\\_Current\\_Researches\\_and\\_Future\\_Directions](https://www.researchgate.net/publication/324492557_A_Survey_of_Fog_Computing_and_Communication_Current_Researches_and_Future_Directions)

The hot topics in Fog Computing are in particular the following topics:

- Support of time-sensitive IoT/5G applications
- Real-time intelligence in IoT/5G services
- Support of Mobile IoT Applications
- Orchestration and Management of 5G-enabled IoT applications
- Vehicle-to-Everything (V2X) services
- Support of geo-distributed control systems
- Support of security and privacy protection in IoT services
- Ambient intelligence in IoT services
- Swarm intelligence in IoT applications
- Mobile information-centric IoT /5G services
- Availability of container-based virtualization at IoT edge

I would like to recommend the following sources of literature:

- J. Santos, T. Wauters, B. Volckaert and F. de Turck: "Fog Computing: Enabling the Management and Orchestration of Smart City Applications in 5G Networks" , Entropy 2018, Vol. 20(1), <https://doi.org/10.3390/e20010004>
- M. S. de Brito, S. Hoque, T. Magedanz, R. Steinke, A. Willner, D. Nehls, O. Keils and F. Schreiner: A Service Orchestration Architecture for Fog-enabled Infrastructures. Proceedings of the Second International Conference on fog and Mobile Edge Computing (FMEC), Valencia, May 2017, DOI: 10.1109/FMEC.2017.7946419
- R. Vilalta, A. Mayoral, R. Casellas, R. Martínez and R. Muñoz: "SDN / NFV Orchestration of Multi-technology and Multi-domain Networks in Cloud / Fog Architectures for 5G Services", 21st OptoElectronics and Communications Conference (OECC) held jointly with 2016 International Conference on Photonics in Switching (PS), Vol.

- X. Liu, Y. Liu, H. Song and A. Liu: Big Data Orchestration as a Service Network, IEEE Communications Magazine, Vol. 55 (9), 2017; DOI: 10.1109/MCOM.2017.1700090
- N. Mohamed, J. Al-Jaroodi, I. Jawhar, S. Lazarova-Molnar and S. Mahmoud: "SmartCityWare: A Service-Oriented Middleware for Cloud and Fog Enabled Smart City Services", IEEE Access, July 2017; DOI: 10.1109/ACCESS.2017.2731382
- Aljumah and T. A. Ahanger: "Fog Computing and Security Issues: A review", 7th International Conference on Computers Communications and Control (ICCCC), 2018
- P. Hu, , H. Ning, T. Qiu, Y. Zhang and X. Luo: Fog Computing Based Face Identification and Resolution Scheme in Internet of Things, IEEE Transactions on Industrial Informatics, Vol. 13 (4), Aug. 2017, DOI: 10.1109/TII.2016.2607178

[1]. Mahmud, Md & Buyya, Rajkumar. (2016). Fog Computing: A Taxonomy, Survey and Future Directions. Internet of Everything - Algorithms, Methodologies, Technologies and Perspectives. 10.1007/978-981-10-5861-5\_5.

[2]. Carla Mouradian, Diala Naboulsi, Sami Yangui, Roch H. Glitho, Monique J. Morrow, and Paul A. Polakos A Comprehensive Survey on Fog Computing: State-of-the-art and Research Challenges,

Real-time analytics at fog,  
Cognitive fog-based applications, methods of Fog-to-Fog and Fog-to-Cloud communication,  
Trust and Security in fog computing.