

# Tianzhu Zhang, Ph.D.

✉ tianzhu.zhang1989@gmail.com

✉ tianzhu.zhang@nokia-bell-labs.com

🌐 <https://ztz1989.github.io/>

🌐 <https://www.linkedin.com/in/tianzhu-zhang-a390485b/>



## Experience

- Aug, 2020 – till now **Research Engineer** Nokia Bell Labs, Paris-Saclay, France.  
Manager: Dr. Fabio Pianese
- Sep, 2020 – till now **Associate Member** Laboratory of Information, Networking and Communication Sciences (LINCS), Paris, France.
- Oct, 2017 – Nov, 2019 **PostDoc researcher** Telecom ParisTech & Cisco Systems, Paris, France.  
Supervisor: Prof. Dario Rossi, Prof. Luigi Iannone
- Jun, 2017 – Aug, 2017 **Intern** Nokia Bell Labs, Paris-Saclay, France.  
Supervisor: Dr. Massimo Gallo
- Nov, 2014 – Nov, 2017 **Ph.D. researcher** Joint Open Lab, Telecom Italia, Turin, Italy.  
Supervisor: Dr. Pino Castrogiovanni

## Education

- 2014 – 2017 **Ph.D., Politecnico di Torino** Department of Electronics and Telecommunications.  
Supervisor: Prof. Paolo Giaccone, Prof. Marcello Chiaberge.  
Thesis title: *Control plane optimization in Software Defined Networking and task allocation for Fog Computing.*
- 2012 – 2014 **M.Sc., Politecnico di Torino** in Computer and Communication Networks Engineering.  
Thesis title: *Distributed Controllers in Software Defined Networks.*
- 2008 – 2012 **B.Sc., Huazhong University of Science and Technology** in Computer Science and Technology.

## Research Publications

### Journal Articles

- Zhang, T.**, Linguaglossa, L., Gallo, M., Giaccone, P., & Rossi, D. (2019). FloWatcher-DPDK: Lightweight line-rate flow-level monitoring in software. *IEEE Transactions on Network and Service Management*, 16(3), 1143–1156.
- Zhang, T.**, Chiasserini, C. F., & Giaccone, P. (2018). Tame: An efficient task allocation algorithm for integrated mobile gaming. *IEEE Systems Journal*, 13(2), 1546–1557.
- Zhang, T.**, Giaccone, P., Bianco, A., & De Domenico, S. (2017). The role of the inter-controller consensus in the placement of distributed SDN controllers. *Computer Communications*, 113, 1–13.

### Conference Proceedings

- Zhang, T.**, Linguaglossa, L., Lipani, A., & Geyer, F. (2019). On the learnability of software router performance via CPU measurements. In *Proceedings of the 15th international conference on emerging networking experiments and technologies*.
- Zhang, T.**, Linguaglossa, L., Gallo, M., Giaccone, P., Iannone, L., & Roberts, J. (2019). Comparing the performance of state-of-the-art software switches for NFV. In *Proceedings of the 15th international conference on emerging networking experiments and technologies*.

- 3 **Zhang, T.**, Linguaglossa, L., Roberts, J., Iannone, L., Gallo, M., & Giaccone, P. (2019). A benchmarking methodology for evaluating software switch performance for NFV, In *2019 ieee conference on network softwarization (netsoft)*. IEEE.
- 4 **Zhang, T.**, Linguaglossa, L., Gallo, M., Giaccone, P., & Rossi, D. (2018a). FlowMon-DPDK: Parsimonious per-flow software monitoring at line rate, In *2018 network traffic measurement and analysis conference (tma)*. IEEE.
- 5 **Zhang, T.**, Linguaglossa, L., Gallo, M., Giaccone, P., & Rossi, D. (2018b). High-speed per-flow software monitoring with limited resources, In *Proceedings of the acm sigcomm 2018 conference on posters and demos*.
- 6 Bianco, A., Giaccone, P., Kelki, S., Campos, N. M., Traverso, S., & **Zhang, T.** (2017). On-the-fly traffic classification and control with a stateful SDN approach, In *2017 ieee international conference on communications (icc)*. IEEE.
- 7 **Zhang, T.**, Bianco, A., Giaccone, P., & Nezhad, A. P. (2017). Dealing with misbehaving controllers in SDN networks, In *Globecom 2017-2017 ieee global communications conference*. IEEE.
- 8 **Zhang, T.**, Bianco, A., & Giaccone, P. (2016). The role of inter-controller traffic in SDN controllers placement, In *2016 ieee conference on network function virtualization and software defined networks (nfv-sdn)*. IEEE.