Tianzhu Zhang, Ph.D.

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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

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.
 B.Sc., Huazhong University of Science and Technology in Computer Science and Technology.

Research Publications

Journal Articles

- **Zhang**, **T.**, Linguaglossa, L., Giaccone, P., Iannone, L., & Roberts, J. (2021). Performance benchmarking of state-of-the-art software switches for nfv. *Computer Networks*, 107861.

 https://doi.org/https://doi.org/10.1016/j.comnet.2021.107861
- **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. https://doi.org/10.1109/TNSM.2019.2913710
- **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.

 https://doi.org/10.1109/JSYST.2018.2829496

Conference Proceedings

- Shelbourne, C., Linguaglossa, L., Lipani, A., **Zhang**, **T.**, & 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.* https://doi.org/10.1145/3360468.3366776
- **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)*. **6** https://doi.org/10.1109/NETSOFT.2019.8806695
- **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*, Orlando, Florida, Association for Computing Machinery. **6** https://doi.org/10.1145/3359989.3365415
- **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). § https://doi.org/10.23919/TMA.2018.8506565
- **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** https://doi.org/10.1145/3234200.3234203
- 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). https://doi.org/10.1109/ICC.2017.7997297
- **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.

 *https://doi.org/10.1109/GLOCOM.2017.8254752
- **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). 6 https://doi.org/10.1109/NFV-SDN.2016.7919481