# Selected publications

- [1] Taveesh Sharma, Paul Schmitt, Francesco Bronzino, Nick Feamster, and Nicole Marwell. "Beyond Data Points: Regionalizing Crowdsourced Latency Measurements". In: *Proceedings of the ACM on Measurement and Analysis of Computing Systems* (2025).
- [2] Gerry Wan, Shinan Liu, Francesco Bronzino, Nick Feamster, and Zakir Durumeric. "CATO: End-to-end Optimization of ML Traffic Analysis Pipelines". In: *USENIX Symposium on Networked Systems Design and Implementation* (2025).
- [3] Youssouph Faye, Francescomaria Faticanti, Shubham Jain, and Francesco Bronzino. "Video Jam: Self-Balancing Architecture for Live Video Analytics". In: *IEEE/ACM Symposium on Edge Computing* (2024).
- [4] Xi Jiang, Shinan Liu, Aaron Gember-Jacobson, Arjun Nitin Bhagoji, Paul Schmitt, Francesco Bronzino, and Nick Feamster. "NetDiffusion: Network Data Augmentation Through Protocol-Constrained Traffic Generation". In: Proceedings of the ACM on Measurement and Analysis of Computing Systems (2024).
- [5] Manavjeet Singh, Sri Pramodh Rachuri, Bryan Bo Cao, Abhinav Sharma, Venkata Bhumireddy, Francesco Bronzino, Samir R. Das, Anshul Gandhi, and Shubham Jain. "OVIDA: Orchestrator for Video Analytics on Disaggregated Architecture". In: *IEEE/ACM Symposium on Edge Computing* (2024).
- [6] Shinan Liu, Francesco Bronzino, Paul Schmitt, Arjun Nitin Bhagoji, Nick Feamster, Hector Garcia Crespo, Timothy Coyle, and Brian Ward. "LEAF: Navigating Concept Drift in Cellular Networks". In: Proceedings of the ACM on Networking (2023).
- [7] Francesco Bronzino, Paul Schmitt, Sara Ayoubi, Hyojoon Kim, Renata Teixeira, and Nick Feamster. "Traffic Refinery: Cost-Aware Data Representation for Machine Learning on Network Traffic". In: Proceedings of the ACM on Measurement and Analysis of Computing Systems (2021).
- [8] Francesco Bronzino, Sumit Maheshwari, Ivan Seskar, and Dipankar Raychaudhuri. "NOVN: A namedobject based virtual network architecture to support advanced mobile edge computing services". In: Elsevier Pervasive and Mobile Computing (2020).
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- [10] Sumit Maheshwari, Dipankar Raychaudhuri, Ivan Seskar, and Francesco Bronzino. "Scalability and Performance Evaluation of Edge Cloud Systems for Latency Constrained Applications". In: IEEE/ACM Symposium on Edge Computing. 2018.

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- [11] Saloua Naama, Kavé Salamatian, and Francesco Bronzino. "Ironing the Graphs: Toward a Correct Geometric Analysis of Large-Scale Graphs". In: arXiv preprint arXiv:2407.21609 (2024).
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- [13] Xi Jiang, Shinan Liu, Saloua Naama, Francesco Bronzino, Paul Schmitt, and Nick Feamster. "AC-DC: Adaptive Ensemble Classification for Network Traffic Identification". In: arXiv preprint arXiv:2302.11718 (2023).

### Journals

- [14] Razanne Abu-Aisheh, Francesco Bronzino, Lou Salaün, and Thomas Watteyne. "CARA: Connectivity-Aware Relay Algorithm for Multi-Robot Expeditions". In: *MDPI Sensors* (2022).
- [8] Francesco Bronzino, Sumit Maheshwari, Ivan Seskar, and Dipankar Raychaudhuri. "NOVN: A namedobject based virtual network architecture to support advanced mobile edge computing services". In: Elsevier Pervasive and Mobile Computing (2020).

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- [1] Taveesh Sharma, Paul Schmitt, Francesco Bronzino, Nick Feamster, and Nicole Marwell. "Beyond Data Points: Regionalizing Crowdsourced Latency Measurements". In: *Proceedings of the ACM on Measurement and Analysis of Computing Systems* (2025).
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- [18] Ayoub Ben Ameur, Andrea Araldo, and Francesco Bronzino. "On the deployability of augmented reality using embedded edge devices". In: *IEEE Annual Consumer Communications & Networking Conference*. 2021.
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- [34] Johann Hugon, Gaetan Nodet, Anthony Busson, and Francesco Bronzino. "Towards Adaptive ML Traffic Processing Systems". In: *Proceedings of the ACM CoNEXT Student Workshop 2023* (2023).
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- [39] Razanne Abu-Aisheh, Myriana Rifai, Francesco Bronzino, and Thomas Watteyne. "(POSTER) Impact of Connectivity Degradation on Networked Robotic Swarm Cooperation". In: 17th International Conference on Distributed Computing in Sensor Systems. 2021.
- [40] Francesco Bronzino, Elizabeth Cully, Nick Feamster, Shinan Liu, Jason Livingood, and Paul Schmitt. "Interconnection Changes in the United States". In: *IAB COVID-19 Workshop* (2021).
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- [43] Razanne Abu-Aisheh, Francesco Bronzino, Myriana Rifai, Brian Kilberg, Kris Pister, and Thomas Watteyne. "Atlas: Exploration and Mapping with a Sparse Swarm of Networked IoT Robots". In: 16th International Conference on Distributed Computing in Sensor Systems. 2020.
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- [50] Francesco Bronzino, Kiran Nagaraja, Ivan Seskar, and Dipankar Raychaudhuri. "Network service abstractions for a mobility-centric future internet architecture". In: Proceedings of the eighth ACM international workshop on Mobility in the evolving internet architecture. 2013.

#### Posters

- [51] Mathieu Guglielmino, Francesco Bronzino, Arnaud Sallaberry, and Sébastien Monnet. "(POSTER) MILADY (Matrix+ Linear Diagram): Visual Exploration and Edition of Multivariate Graphs for Computer Networks Management". In: *The Eurographics Association* (2023).
- [52] Razanne Abu-Aisheh, Myriana Rifai, Francesco Bronzino, and Thomas Watteyne. "(POSTER) Impact of Connectivity Degradation on Networked Robotic Swarm Cooperation". In: 2021 17th International Conference on Distributed Computing in Sensor Systems (DCOSS). IEEE. 2021, pp. 57–59.
- [53] Paul Schmitt et al. Correlating Network Congestion with Video QoE Degradation a Last-Mile Perspective. Talk at AIMS 2018, Workshop on Active Internet Measurements. 2018.

- [54] Francesco Bronzino et al. *Understanding and Improving video QoE a Last-Mile Perspective*. Poster at ACM Internet Measurement Conference (IMC) 2017. 2017.
- [55] Francesco Bronzino, Dipankar Raychaudhuri, and Ivan Seskar. "Demonstrating context-aware services in the mobility first future internet architecture". In: 28th International Teletraffic Congress. 2016.
- [56] Francesco Bronzino et al. Cloud Services Enhancements Through Application Specific Routing in MobilityFirst FIA. Poster and Demonstration at the 22nd GENI Engineering Conference (GEC-22). 2015.
- [57] Francesco Bronzino et al. Public Safety Focus: Connected Vehicles Assisting First Responders. Plenary talk and Demonstration at the 22nd GENI Engineering Conference (GEC-22). 2015.
- [58] Francesco Bronzino et al. Supporting Rich Network Services in Name Based Architectures. Talk at the NSF Future Internet Architecture Workshop. 2015.
- [59] Francesco Bronzino et al. In-Network Compute Layer in MobilityFirst Future Internet Architecture FIA. Poster and Demonstration at the 20th GENI Engineering Conference (GEC-20). 2014.
- [60] Francesco Bronzino et al. Introduction to the MobilityFirst FIA Protocol Suite. Tutorial at the 21st GENI Engineering Conference (GEC-21). 2014.
- [61] Francesco Bronzino et al. Context Services in MobilityFirst FIA. Plenary talk and Demonstration at the 18th GENI Engineering Conference (GEC-18). 2013.
- [62] Francesco Bronzino et al. MobilityFirst Network API use in Mobile Applications. Poster and Demonstration at the 16th GENI Engineering Conference (GEC-16). 2013.
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## Tech reports

- [64] Razanne Abu-Aisheh, Francesco Bronzino, Myriana Rifai, Brian Kilberg, Kris Pister, and Thomas Watteyne. "Exploration and Mapping using a Sparse Robot Swarm: Simulation Results". PhD thesis. Inria, 2020.
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#### Software and datasets

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## On the news

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# Funding

- [85] AAP FIL INTERFERE: Stressing Systems Security Through on the Fly Network Traffic Generation (10k EUR). https://fil.cnrs.fr.
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- [88] ANR GTTP: Global Tracking Transfer Protocol (501k EUR). https://anr.fr.
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