



IP PARIS

# CSC7321 Workshop

*Date:* October 6, 2021

*Location:* Palaiseau, room 1A340

*Workshop theme:* Middleware

*Organizer:* Georgios Bouloukakis, <https://gbouloukakis.com>

# List of articles to be presented (1/2)

→ The articles selected introduce middleware-based research approaches.

1. **SDNFV: Flexible and Dynamic Software Defined Control of an Application- and Flow-Aware Data Plane**

*17th International Middleware Conference, 2016*

*Keywords:* Packet flows, Programmable networks, SDN

2. **A Self-Stabilizing Publish/Subscribe Middleware for IoT Applications**

*ACM Transactions on Cyber-Physical Systems, 2018*

*Keywords:* self adaptive systems, routing paths, liveness properties

3. **Omni: An Application Framework for Seamless Device-to-Device Interaction in the Wild**

*19th International Middleware Conference, 2018*

*Keywords:* IoT discovery, Middleware APIs, Access networks

# List of articles to be presented (2/2)

4. **FLeet: Online Federated Learning via Staleness Awareness and Performance Prediction**  
*21th International Middleware Conference, 2020*  
*Keywords:* Federated learning, performance prediction
5. **Monitorless: Predicting Performance Degradation in Cloud Applications with Machine Learning**  
*20th International Middleware Conference, 2019*  
*Keywords:* Performance, ML, Cloud, Monitoring
6. **RemedioT: Remedial Actions for Internet-of-Things Conflicts**  
*6th ACM International Conference on Systems for Energy-Efficient Buildings, Cities, and Transportation (Buildsys) 2019*  
*Keywords:* IoT Conflicts, framework

# Selection of articles

- Set up groups of 2 members
- Each group must select 3 articles and rank them in order of preference
  - Example:
    1. Monitorless: Predicting Performance Degradation in Cloud Applications with ML
    2. FLeeT: Online Federated Learning via Staleness Awareness and Performance Prediction
    3. Omni: An Application Framework for Seamless Device-to-Device Interaction in the Wild
- Email your group and articles selection to:  
[georgios.bouloukakis@telecom-sudparis.eu](mailto:georgios.bouloukakis@telecom-sudparis.eu)

# Presentation guidelines

- Slide presentation
- Duration of each presentation: **60 minutes**
  - ◆ **45 minutes** presentation
  - ◆ **15 minutes** questions
- Slides have to be delivered on Moodle in **PDF** the day before the presentation.
- Among other elements, it is compulsory to present the following:
  - ◆ Motivation
  - ◆ Article contributions
  - ◆ Background information (e.g., Federated Learning, SDN, etc)
  - ◆ System overview and/or architecture
  - ◆ Evaluation
  - ◆ Related work
  - ◆ Future work
  - ◆ Conclusion

# Evaluation of the presentation

- You have to demonstrate your understanding of the article, the ability to analyze, to prepare and present slides and answer to questions.
- Presentation rating:
  - ◆ Quality of the slides content (3)
    - Content, spelling, structure
  - ◆ Quality of the oral presentation (4)
  - ◆ Level of understanding of the article and its background (7)
  - ◆ Answers to Questions (4)
  - ◆ Study of related (cited) articles (2)

Thank You