CSC7321 Workshop

Date: October 6, 2021
Location: Palaiseau, room 1A340
Workshop theme: Middleware
Organizer: Georgios Bouloukakis, https://gbouloukakis.com
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

   *19th International Middleware Conference, 2018*  
   *Keywords*: IoT discovery, Middleware APIs, Access networks
4. **FLleet: 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**  
   *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. FLee: Online Federated Learning via Staleness Awareness and Performance Prediction
- Email your group and articles selection to: 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