

Workshop on Machine Learning for 6G Connected Cars: Agent Systems and Montecarlo Simulation (ML6CC-ASMS)

Brief Description: The workshop titled "Machine Learning for 6G Connected Cars: Agent Systems and Montecarlo Simulations" focuses on the technical aspects related to the application of machine learning in the context of 6G connected cars. It specifically explores the use of agent systems and Monte Carlo simulations to enhance and optimize the performance of connected cars in the 6G network environment.

The workshop aims to address challenges and opportunities in leveraging machine learning techniques to develop intelligent agent systems for connected cars operating in the 6G network. These agent systems utilize advanced algorithms and models to enable autonomous decision-making and adaptive behavior in real-time scenarios.

Additionally, the workshop emphasizes the use of Monte Carlo simulations as a valuable tool for evaluating and testing the performance of machine learning algorithms and agent systems within the context of 6G connected cars. Monte Carlo simulations allow for the exploration of various scenarios, data sets, and network conditions to assess the robustness and reliability of the proposed solutions.

By bringing together researchers, practitioners, and industry experts, the workshop aims to foster knowledge sharing, collaboration, and innovation in the field of machine learning for 6G connected cars. It provides a platform for discussing the latest advancements, methodologies, and best practices related to agent systems and Monte Carlo simulations, ultimately contributing to the development of intelligent and efficient connected car systems in the 6G era.

The planned format of the workshop

Duration: 6 hours

- Introduction and Opening Remarks (30 minutes)
 - Welcome address by the workshop organizers
 - Overview of the workshop objectives and agenda
 - Introduction to the theme of machine learning for 6G connected cars
- Keynote Presentation (60 minutes)
 - Invited keynote speaker provides an in-depth overview of the application of machine learning in 6G connected cars
 - Insights into the use of agent systems and Monte Carlo simulations for optimizing performance and decision-making
 - Q&A session with the audience
- Research Paper Presentations (90 minutes)
 - Authors of accepted research papers present their work related to the workshop's topics of interest
 - Each presenter is allocated a specific time slot for their presentation

- After each presentation, a short Q&A session allows participants to seek clarifications and engage in discussions
- Coffee Break and Networking (30 minutes)
 - Participants have the opportunity to network, discuss research ideas, and interact with fellow attendees
- Panel Discussion: Challenges and Opportunities (90 minutes)
 - A panel of experts from academia and industry discuss the challenges and opportunities in machine learning for 6G connected cars
 - Topics may include data privacy, security, real-time decision-making, integration of machine learning algorithms with 6G networks, etc.
 - Moderated Q&A session with the audience to encourage active participation and knowledge sharing
- Interactive Workshop Activity (90 minutes)
 - Participants engage in a hands-on activity related to agent systems and Monte Carlo simulations in the context of 6G connected cars
 - Participants may work in groups to solve a specific problem or scenario using machine learning techniques
 - Facilitators guide the activity and provide assistance when needed
- Wrap-up and Closing Remarks (30 minutes)
 - Summary of key takeaways and insights from the workshop discussions and activities
 - Acknowledgment of participants, speakers, and contributors
 - Closing remarks by the workshop organizers

Call for Papers

Workshop on Machine Learning for 6G Connected Cars: Agent Systems and Montecarlo Simulations

Website: <https://www.charusat.ac.in/icSoftComp2023/workshops.php>

Submission Deadline: 31/08/2023

Overview:

The rapid advancements in machine learning and wireless communication technologies have opened up new possibilities for enhancing the capabilities of connected cars in the 6G network. The workshop on "Machine Learning for 6G Connected Cars: Agent Systems and Montecarlo Simulations" aims to bring together researchers, practitioners, and industry experts to explore the technical aspects and challenges of leveraging machine learning techniques in the context of 6G connected cars. The workshop will focus on the application of intelligent agent systems and Monte Carlo simulations to optimize the performance and efficiency of connected cars operating in the 6G network environment.

Topics of Interest:

The workshop welcomes original research papers, case studies, and innovative ideas addressing, but not limited to, the following topics:

1. Machine learning algorithms for intelligent agent systems in 6G connected cars
2. Optimization techniques for adaptive decision-making in real-time scenarios
3. Data-driven approaches for autonomous behavior and learning in connected cars
4. Performance evaluation and benchmarking of machine learning algorithms in 6G connected cars
5. Application of reinforcement learning and deep learning in connected car systems
6. Monte Carlo simulations for testing and evaluating machine learning algorithms in 6G network environments
7. Robustness, reliability, and security of machine learning-based connected car systems
8. Integration of 6G network capabilities with machine learning algorithms in connected cars
9. Privacy and ethical considerations in machine learning-enabled connected car systems
10. Case studies and practical implementations of machine learning in 6G connected cars

Submission Guidelines:

Prospective authors are invited to submit original, unpublished papers in PDF format. Submissions should adhere to the workshop's formatting guidelines, which will be provided on the workshop website. All submissions will undergo a rigorous peer-review process by an expert panel. Accepted papers will be published in the workshop proceedings and made available through the workshop website.

Paper Submission Deadline: 31/08/2023

Workshop Organizers:

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Assistant Professor,

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