Call for Papers - 11th Workshop on Smart Service Systems (SmartSys)

https://smartsys2026.dii.unipi.it/

Technology succeeds when it provides benefits to society either directly or indirectly. Understanding the social and economic impact and human-centered aspects of a smart system or technology in advance and designing the system apriori with potential value-added services help spur the discoveries of new tools, methodologies, and innovative services. Smart service systems span across various socio-technical facets comprising devices, people, organizations, environments, and technologies to sense, actuate, control, and assess the physical, cyber, and societal artifacts of the human service systems. These self-adaptive and fault-tolerant systems require the design to continuously increase the quality and productivity, compliance, and sustainability of the smart services it offers. A human-centered perspective and cognitive learning help create multi-facet value-added services and catalyze the sustained economic growth of these smart service systems. Furthermore, understanding the multi-modal sensing, control, heterogeneity, and interdependency between different physical, virtual, and logical components of such a complex system will enable the realization of new transformative smarter service systems. If successful, this can help improve the quality-of-service of the customers, quality of life of the citizens, and quality-of returns of the stakeholders and investors.

Nurturing the development of smart service systems seeks inter-and trans-disciplinary crosscutting research threads from the system and operational engineering, computer science and information systems, social and behavioral science, computational modeling and industrial engineering, etc. This workshop aims to bring together practitioners and researchers from academia and industry to disseminate and share knowledge via the discussion forum and technical presentations on smart service systems' fundamental knowledge and principles. We envision these smart systems enabling the value co-creation in sensing, actuating, data analytics, learning, cognition, and control of human-centric cyber-physical-social systems and future work.

Topics of interest include, but are not limited to:

Innovative tools, methodologies, framework, and testbed solutions for pervasive and smart service systems

- Personalized healthcare, smart energy, smart cities, smart manufacturing, intelligent transportation, education, precision medicine and agriculture, national security, behavior change support, etc.
- Novel architectures and interoperable solutions for internet of things
- Design and developments of intelligent systems, intelligent enterprises and cyber-physical-social-systems.

- Models and methodologies for designing systems of systems.
- Incorporating Context and situational awareness.
- Smart infrastructure and testbed to support the integration of autonomous systems and innovative applications.
- Resilient/robust smart system and infrastructure design
- Modeling, analysis, co-production, and co-evolution of human activity, behavior and interaction to effectively adapt and percolate longitudinal smart service systems.

Role of Machine Intelligence in pervasive and smart service systems

- Role of machine learning, artificial intelligence, robotics, control theory, information and communications technologies
- Role of formal methods in computer networks, cyber-physical systems, Internet-of-Things and machine learning
- AI/ML application in pervasive computing and integrated embedded devices and systems
- Integrating speech, audio, and language models in pervasive context
- Distributed AI/ML: Methods, Applications, and Integration Across Edge and Cloud Continuum
- Fairness and Bias Mitigation in AI algorithms for pervasive systems
- Case studies and practical experiences deploying AI/ML at scale and the edge.
- Resource-efficient AI/ML algorithms for edge devices
- AI/ML for large-scale edge computing solutions

Data Analytics, Information Exchange, and Sensor Integration in pervasive and smart service systems

- Information extraction and interpretation from sensors, actuators, smart phones, smart watch, and human.
- Big data analytics approaches for providing better customer services, and innovating new types of sustainable services.
- Design of inter-dependent complex global systems such as healthcare, smart grid, computer networks, logistics and supply-chains, financial markets etc.
- Leveraging Human-in-the-Loop Feedback for Enhanced Context-Awareness in pervasive systems

- Design of people-centric services and technologies for providing better services such as food, transportation, and places to live.

Submission instructions

Authors are invited to submit regular (full) papers for presentation at the workshop, describing original, previously unpublished work, which is not currently under review by another workshop, conference, or journal. Regular papers should present novel perspectives within the general scope of the workshop.

Papers may be no more than 6 pages in length. Papers in excess of page limits shall not be considered for review or publication. All papers must be typeset in double-column IEEE format using 10pt fonts on US letter paper, with all fonts embedded. The IEEE LaTeX and Microsoft Word templates, as well as related information, can be found at the [IEEE Computer Society website](#). Submissions must be made via EDAS.

Each accepted paper will require a full SMARTCOMP registration (no registration is available for workshops only).

Submission link: https://edas.info/newPaper.php?c=34470

Important dates

Manuscript submission: 9th March, 2026

Paper acceptance notification: 29th April, 2026

Camera-ready paper submission: TDA

Workshop: 22nd June 2026

Organizing Committees

Workshop Co-Chairs:

- Nirmalya Roy, University of Maryland, Baltimore County, US
- Carlo Vallati, University of Pisa, Italy
- Gurdip Singh, Syracuse University, US

Technical Program Co-Chairs:

- Mohamed Nafea, Missouri University of Science & Technology, US
- Marco Pettorali, University of Pisa, Italy

Publicity chair

- Jacopo Sabatino, University of Florence, Italy
- Avijoy Chakma, Bowie State University, US