

IEEE ITSS - Italy Best PhD Dissertation Award

The **Italian Chapter of the IEEE ITS Society** has been officially approved in February 2021. Its main objective is to gather all researchers working in Italy, both in academic institutions and in the industry, in the broad area of Intelligent Transportation Systems. The Italian Chapter of the IEEE Intelligent Transportation Systems Society represents an important opportunity for Italian researchers to meet, to share new ideas for projects and collaborations, to promote common actions for both education and research, to discuss the possibilities to spread the knowledge of ITS community to other scientific communities and to local/regional/national/international institutions and companies, as well as to involve (high school, Master and PhD) students in learning initiatives in the area of Intelligent Transportation Systems.

Along this line, the IEEE ITS Italian Chapter has decided to create, starting from 2021, the **Best PhD Dissertation Award** for the best dissertation in any ITS area that is innovative and relevant to practice. This award is established to encourage *doctoral research* that combines theory and practice, makes in-depth technical contributions, or is interdisciplinary in nature, having the potential to contribute to the ITS area and broaden the ITS topics from either the methodological or application perspectives.

Eligibility

For the 2025 IEEE ITS Italian Chapter Best PhD Dissertation Award we invite nominations of young researchers whose PhD Thesis meets the following requirements:

- Research mainly conducted in Italy or in collaboration with Italian institutes (at least one advisor must be affiliated to an Italian institute).
- Diploma granted between January 1, 2023 and March 31, 2025.

We invite theses on a broad spectrum of topics that relate to ITS. These topics include, but are not limited to:

- Autonomous Vehicles
- Al for ITS
- Big data analytics, machine learning, AI applications
- Case studies and assessment of ITS applications
- Communication (inter-vehicle, vehicle-to-roadside)
- Computers (hardware, software)
- Control (adaptive, fuzzy, cooperative, neuro,)
- Decision Systems (expert systems, intelligent agents)
- Demand modelling and travel behavior under ITS
- Energy and Environment
- Freight transportation and logistics



- Human-Machine Interfaces
- Imaging & Real-Time Image Analysis
- Infrastructures and networks (engineering, architecture, evaluation)
- Information Systems (databases, data fusion, security)
- ITS in Developing Countries
- ITS-oriented traffic planning, operations and management
- Mobility as a Service
- Privacy & security of ITS
- Rail Operations and Management
- Reliability & Quality Assurance
- Sensors (infrastructure and vehicle-based)
- Simulation (continuous, discrete, real-time)
- Signal Processing for transportation
- Smart Public Transport Systems
- Societal implications of ITS
- Sustainable and Smart Mobility
- Standards in transport area
- Technology Forecasting & Transfer
- Traffic Flow Modelling and Control

Selection Process

The winner of the award will be determined in two steps. First, a review committee will evaluate the submission material and identify a short list of candidates. Then, the selected candidates will be invited to give a presentation of their work with the review jury. The jury will then select the winner.

The selection process will be based on the following criteria:

- Originality and depth of contribution,
- Methodological soundness,
- Form and quality of presentation, and
- Significance for the research field.

Submission

The candidate is responsible for submitting the nomination material by uploading a unique PDF file using the following link:

https://forms.gle/Lq8ycm8sY8KsvojJ7

The nomination material, as a unique PDF, must include the following documents:



- 1. A one-page abstract (as PDF file) written by the award candidate, highlighting the significance of the problem, the technical approach taken, the application context and potential, and the scope of the dissertation.
- 2. The full doctoral dissertation (as PDF file).

Submission Deadline

The deadline for the 2025 IEEE ITS Italian Chapter Best PhD Dissertation Award is **April 15, 2025** (Strict).

Prize and Presentation

All the finalists selected for the Best Ph.D. Dissertations Award will have the opportunity to present their scientific results in a dedicated session of the IEEE ITSS Italian Chapter annual event, which will be held in **Salerno** on **July 10th, 2025**.

All the finalists will be acknowledged by the Italian Chapter community, on the Italian Chapter website, and social media, and will receive a certificate for their significant scientific contribution. The winner will be announced during the annual special event of the Italian Chapter and will receive a monetary prize of 500€ (subject to approval of the IEEE Italy Section).

Organizing Committee

Claudia Caballini, Politecnico di Torino [claudia.caballini@polito.it]
Paolo Falcone, Università degli Studi di Modena e Reggio Emilia [falcone@unimore.it]
Luigi Pariota, Università degli Studi di Napoli Federico II [luigi.pariota@unina.it]