€TRAINING

Advanced Intelligent Transportation Systems

5 - 9 August 2024
Kuala Lumpur (Malaysia)

Advanced Intelligent Transportation Systems

Introduction:

This is a prerequisite for and continuation of the Intelligent Transportation Systems ITS training course for beginners, which was very successful. We are seeing how quickly technology is developing; many systems that were significant discoveries yesterday are already being supplanted by even more significant ones. The installation of Intelligent Transportation Systems ITS is becoming more of a requirement than an innovation at this point.

With the emergence of Big Data, Artificial Intelligence AI, and the Internet of Things IoT, Intelligent Transportation Systems ITS is expanding its reach. In some ways, the Intelligent Transportation Systems ITS of the past are evolving into legacy systems as the current technology advances quickly and opens up new possibilities. Since the Intelligent Transportation Systems ITS now has vehicles and infrastructure at its core and all other users are the system's beneficiaries, it is becoming more and more user-centric and no longer centers on drivers.

Course Objectives:

At the end of this course the participants will be able to:

- Recognize the advantages of Intelligent Transportation Systems ITS and the potential for innovation.
- Utilize Big Data analysis methods and tools in Intelligent Transportation Systems ITS
- Recognize how intelligent transportation systems ITS are using artificial intelligence AI ITS
- Prepare for the management of change in ITS intelligent transportation systems
- familiarize yourself with the use of traffic data visualization techniques.
- Utilize pattern recognition for planning, upkeep, and monitoring of traffic infrastructure and operations

Targeted Audience:

- Project Managers
- Traffic Engineering and Researchers
- Transport Engineers and Researchers
- Technology Engineers, CTOs and CIOs
- Professionals in Urban Planning
- Strategic Development Personnel
- Architects involved in Urban Design

Course Outline:

Unit1: Big Data and Intelligent Transportation Systems ITS

- Intelligent Transportation Systems ITS Projects Using Big Data
- Data Visualization for Intelligent Transportation Systems in Urban Planning ITS Information Gathering and Analysis
- Intelligent transportation systems' data sources and correlation ITS
- Data Exchange and Other Data Sources

Unit2: Artificial Intelligence AI and Intelligent Transportation Systems ITS AI

- Systems for monitoring and controlling traffic with artificial intelligence
- Vehicles using Artificial Intelligence
- Drone use and pattern recognition
- Recognizing traffic signs and updating navigational maps
- Systems of Intelligent Transportation ITS for Self-Driving Vehicles
- The Multiple Layers of Traffic

Unit3: ITS-Based Improvement of Urban Mobility

- Travel Time Shortening
- Rerouting and Automatic Routing
- Distance detection
- energy efficiency
- Social Networking Mobile

Unit4: The ITS and IoT for User Centric Design

- User - Vehicle - System Communication
- System Adaptation of User Behavior Patterns
- Adoptive Speed Limits
- Adoptive Parking
- Multimodal Intelligent Transportation Systems ITS

Unit5: Intelligent Transportation Systems ITS Sustainability

- Intelligent Transportation Systems ITS Sources of Finance
- Intelligent Transportation Systems ITS Cost Reduction Analysis
- Intelligent Transportation Systems ITS Adaptation for Road Asset Management
- Intelligent Transportation Systems ITS as a Profit Center
- The future of Intelligent Transportation Systems ITS