INSTITUTE
OF COMMUNICATION,
INFORMATION
AND PERCEPTION
TECHNOLOGIES

Scuola Superiore
Sant'Anna

ESTEP

# CALL FOR ABSTRACTS

## The 3° ESTEP WORKSHOP
(Webinar)

## Impact and Opportunities of Artificial Intelligence in the Steel Industry

## October & November 2020

| | | |
|---|---|---|
| Web-Session 1 | October 15 | 9:00 - 13:00 |
| Web-Session 2 | October 22 | 9:30 - 12:00 |
| Web-Session 3 | October 29 | 9:30 - 12:00 |
| Web-Session 4 | November 5 | 9:30 - 12:00 |

With the support of:

**STEELMASTER®**

The workshop is dedicated to key players of the steel sector such as steel manufacturers, systems integrators, solution providers, academic and R&D experts. Contributions from other process industry sectors are welcome.

The Web-Workshop will be held in four web-sessions:

Session 1    Enablers & Barriers: Case Studies from steel and other sectors

Session 2    Needs and impact of AI & ML on the steel industry

Session 3    Implementation, IT-OT links, Cybersecurity, HMI & M2M

Session 4    AI in steel Operations: examples

### Participation fee
• 50 € per person for 1 session
• 150 € per person for all sessions
Company fees
• 150 € for 1 person
• 250 € for 2 persons
• 300 € for 3 persons
• 350 € for >3 persons

### Information and contacts
For information and subscriptions, contact the ESTEP Secretariat, Mrs. Delphine Snaet

D.Snaet@estep.eu

### Scientific Committee:
Jerker Delsing (Luleå University of Technology)
Valentina Colla (Scuola Superiore Sant'Anna)
Marcus Neuer (VDEh BFI-BetriebsForschungsInstitute)
Costanzo Pietrosanti (Danieli Automation S.p.A.)

## Background

Artificial Intelligence (AI) and Machine Learning (ML) allow objects such as computers and robots mimicking humans behavior even in cooperation with them into *smart networks*. AI applications are already implemented or under development in the steel factories. Therefore, it is time for a dedicated event to analyze consequences and opportunities offered by AI. In addition there is the need to rationalize the fascination of creating digital and cyber-physical systems able to learn from experience through ML without fears on the centrality of human role.

Therefore, the participation of the steel community and the other industrial sectors represents a step ahead to reach such aims with the ambition to share the perception of AI, to provide indications to dedicated R&D actions involving UE sectors in view of needs and expectations of the involved players.

Societal aspects and deep consideration of the impact on workforce and education systems are also major issues in empowering human role in the Smart Factory. Workforce must be provided with skills to foster a conscious fearless approach by seizing opportunities and enriching operators and decision makers with the benefits of AI.

## Topics

Experts, industrial and ICT engineers and managers, solution providers and system integrators, suppliers, universities and research institutes, consulting companies, national and international organizations operating in steel and other industrial sectors are invited to submit abstracts on AI-related topics relevant to the steel context such as:

- Industrial needs and R&D directions in Artificial Intelligence and Machine Learning
- Data management and data quality issues relevant for the application of AI and ML
- Advantages, capabilities and trends in the industrial application of AI and ML
- Constraints, opportunities and threats of data-driven technologies, including cyber-security aspects
- Standards and Artificial Intelligence Management Models in Process Industry
- Impact of AI and ML: workforce, operations, systems and organization
- Examples and Experiences.

## Deadlines

- Submission of abstracts            September 18, 2020
  to be sent to D.Snaet@estep.eu
- Information on acceptance        September 25, 2020
- Opening online registration      September 16, 2020
- Submission of papers for published proceedings (optional)                    October 1, 2020
- Info on paper acceptance        October 8, 2020