

**Call for application for research scholarships
for post-graduate international candidates**

RESEARCH PROJECT N. 2

Title

Blockchain for Physical Internet and Sustainable Logistics

Scientific responsible (name, surname, role)

Guido Perboli, Associate Professor, Director of the ICT for City Logistics and Enterprises Lab
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Short description of the research activity (max 250 words)

The blockchain is an incorruptible digital ledger of economic transactions that can be programmed to record not just financial transactions but virtually everything of value.

Therefore, this projects wants to explore the potential applications of blockchain to the supply chain problem, in particular when it is associated with the Physical Internet paradigm, a vision for a sustainable and deployable solution to global problems associated with the way “we move, store, realize, supply and use physical objects all around the world”.

In more details, the candidate will explore the usage of the IOTA blockchain, a blockchain developed explicitly for Internet of Things applications, and its application to the domain of Sustainable Logistics.

These activities will be carried out in collaboration with the ICE for City Logistics and Enterprises Lab of Politecnico di Torino and Istituto Superiore Mario Boella.

Specific requirements (experiences, skills)

Programming in Java and JavaScript

Preferably Master in computer engineering or Logistics/Industrial Engineering with advanced computer skills

Basic knowledge of combinatorial optimization/heuristic methods (genetic algorithms, tabu search, etc.)

Additional desiderata. Experience in the development of web services or mobile applications

Website of the research group (if any)

icelab.polito.it

Keywords (min 3, max 6)

Blockchain, Sustainable logistics

Research Area (max 1)

Computer Engineering

The present form should be filled in English and sent to scudo@polito.it by 2nd October 2017