



PhD in INGEGNERIA DELL'INFORMAZIONE / INFORMATION TECHNOLOGY - 40th cycle

Research Area n. 3 - Systems and Control

PNRR 630 Research Field: OPTIMIZING LOGISTICS PROBLEMS CONSIDERING
INNOVATIVE TECHNOLOGIES

Monthly net income of PhDscholarship (max 36 months)

€ 1500.0

In case of a change of the welfare rates during the three-year period, the amount could be modified.

Context of the research activity

Motivation and objectives of the research in this field	Develop advanced optimization algorithms aiming at efficiently deploying automated packing and sorting technologies at an operational context. Optimizing the synchronization of packing activities between logistics nodes.
Methods and techniques that will be developed and used to carry out the research	Exact optimization algorithms for discrete optimization problems. Heuristic optimization algorithms for discrete optimization problems. Machine learning for predictive algorithmic components.
Educational objectives	Developing mathematical model for complex problems. Developing advanced optimization algorithms.
Job opportunities	Research position in operations research. Research and development positions in the logistics sector.
Composition of the research group	2 Full Professors 3 Associated Professors 3 Assistant Professors 5 PhD Students
Name of the research directors	prof. Ola Jabali and Federico Malucelli



Contacts	
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Additional support - Financial aid per PhD student per year (gross amount)	
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Housing - Foreign Students	--
Housing - Out-of-town residents (more than 80Km out of Milano)	--

Scholarship Increase for a period abroad	
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Amount monthly	750.0 €
By number of months	6

National Operational Program for Research and Innovation	
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Company where the candidate will attend the stage (name and brief description)	E80 Group S.p.a. , Italia
By number of months at the company	6
Institution or company where the candidate will spend the period abroad (name and brief description)	HEC Montréal, Canada
By number of months abroad	6

Additional information: educational activity, teaching assistantship, computer availability, desk availability, any other information

EDUCATIONAL ACTIVITIES (purchase of study books and material, including computers, funding for participation in courses, summer schools, workshops and conferences): financial aid per PhD student.

TEACHING ASSISTANTSHIP: availability of funding in recognition of supporting teaching activities by the PhD student.

There are various forms of financial aid for activities of support to the teaching practice. The PhD student is encouraged to take part in these activities, within the limits allowed by the regulations.

COMPUTER AVAILABILITY:

1st year: Yes

2nd year: Yes

3rd year: Yes