



# PhD in INGEGNERIA DELL'INFORMAZIONE / INFORMATION TECHNOLOGY - 39th cycle

Research Area n. 1 - Computer Science and Engineering

**PNRR 117 Research Field: ADAPTATION-IS-ALL-YOU-NEED IN MACHINE AND DEEP  
LEARNING AS-A-SERVICE**

**Monthly net income of PhDscholarship (max 36 months)**

**€ 1400.0**

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

## Context of the research activity

<b>Motivation and objectives of the research in this field</b>	The technological evolution of Cloud-based computing infrastructures intercepted the ever-growing demand of machine and deep-learning solutions through the as-a-service approach. Unfortunately, to be effective, such an approach requires the ability to process data on the Cloud in an adaptive manner so as to track changes in the data and adapt to new working conditions. The research will focus on the design of machine and deep learning solutions able to track and adapt to users' data while operating on the Cloud in a "as-a-service" manner.
<b>Methods and techniques that will be developed and used to carry out the research</b>	The objectives of the research will be achieved by advancing the state-of-the-art in the field of adaptive solutions for machine learning (i.e., learning in presence of concept drift) as well as in the field of machine and deep learning operating in a "as-a-service" manner.
<b>Educational objectives</b>	The Ph.D. will gain high-quality and integrated competences in the field of machine and deep learning as-a-service as well as learning in presence of concept drift.
<b>Job opportunities</b>	The novel and heterogeneous background (strong competences on both theory and application) of the Ph.D. candidate will pave the way to positions in the academia,



	in research centers and in all the companies designing and developing machine and deep learning solutions for Cloud Computing.
<b>Composition of the research group</b>	1 Full Professors 0 Associated Professors 1 Assistant Professors 5 PhD Students
<b>Name of the research directors</b>	Prof. Manuel Roveri

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

<b>Scholarship Increase for a period abroad</b>	
<b>Amount monthly</b>	700.0 €
<b>By number of months</b>	6

<b>National Operational Program for Research and Innovation</b>	
<b>Company where the candidate will attend the stage (name and brief description)</b>	A.A.G. STUCCHI s.r.l. u.s.
<b>By number of months at the company</b>	6
<b>Institution or company where the candidate will spend the period abroad (name and brief description)</b>	Eindhoven University of Technology
<b>By number of months abroad</b>	6

<b>Additional information: educational activity, teaching assistantship, computer availability, desk availability, any other information</b>
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: individual use.

DESK AVAILABILITY: individual use.