POLITECNICO DI MILANO

PhD in DATA ANALYTICS AND DECISION SCIENCES - 39th cycle

PARTENARIATO PNRR Research Field: ARTIFICIAL INTELLIGENCE TO PURSUE SUSTAINABILITY AND RESILIENCE

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	
Motivation and objectives of the research in this field	In the current competitive landscape, Artificial Intelligence (AI) technologies can play a relevant role in promoting sustainability in several ways, ranging from environmental monitoring and conservation, energy optimization, disaster response and resilience, to social equality and accessibility. The PhD thesis will address, in particular, the development of predictive models that inform decision-making processes of private organizations and policy makers, relying on the integration of heterogeneous data sources. The PhD scholarship is funded by NextGenerationEU, in the framework of the GRINS - Growing Resilient, INclusive and Sustainable project (Spoke 7, GRINS PE00000018 - CUP D43C22003110001); decreto di concessione DD n. 1558 del 11/10/2022.
Methods and techniques that will be developed and used to carry out the research	The PhD thesis will be developed based on a mix of research methodologies, giving particular emphasis to new approaches in the fields of statistical modeling and data analysis, using ideas that bridge the gap between statistics and machine learning and develop tools for the statistical treatment of big data.
Educational objectives	The PhD candidate will learn - how to frame complex problems in the field of sustainability

	- how to manage large, heterogeneous and unstructured data - how to develop statistical models and tools to understand and address such problems
Job opportunities	PhD graduates in this research field can access a diversified range of job opportunities, including advisory and strategic consulting companies; multinational companies; public institutions and universities at the national and international level.
Composition of the research group	3 Full Professors 1 Associated Professors 4 Assistant Professors 2 PhD Students
Name of the research directors	M. Arena, G. Azzone. P. Secchi

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

Scholarship Increase for a period abroad	
Amount monthly	700.0 €
By number of months	6

Additional information: educational activity, teaching assistantship, computer availability, desk availability, any other information
List of Universities, Companies, Agencies and/or National or International Institutions that are cooperating in the research: 1. Polis Lombardia 2. Università di Bari 3. Vodafone Italia 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.

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