



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

Research Area n. 1 - Computer Science and Engineering

**PARTENARIATO PNRR Research Field: DECENTRALISED SOLUTIONS FOR UNIVERSAL
ACCESS TO FINANCIAL SERVICES**

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**

Blockchain technologies can offer new perspectives in the creation of tools that support the openness, transparency, and accessibility of financial instruments. The use of smart contracts for the definition of participatory governance models, such as in decentralized autonomous organizations, can support potentially more sustainable and inclusive development models.

This project research is in the framework

ECS-MUSA

ECOSISTEMA DELL'INNOVAZIONE MUSA -

MULTILAYERED URBAN SUSTAINABILITY ACTION

CUP D43C22001410007

Decreto di Concessione D.D. 1055 del 23/06/2022

D.D. 3277 del 30/12/2022 Avviso pubblico per la presentazione di Proposte di intervento per la creazione di 12 Ecosistemi dell'innovazione sul territorio nazionale da finanziare nell'ambito del Piano Nazionale di Ripresa e Resilienza, Missione 4 Componente 2 Investimento 1.5 - Creazione e rafforzamento di ?ecosistemi dell'innovazione?, costruzione di ?leader territoriali di R&S? - finanziato dall'Unione europea - NextGenerationEU.



Methods and techniques that will be developed and used to carry out the research	To develop the research, methods will be developed that draw on computer science and software engineering for the design and development of computer components, with particular reference to cryptography, security and distributed systems. Furthermore, tools of economic analysis and mechanism design will be considered.
Educational objectives	* development of analysis and design capabilities of systems based on blockchain and smart contracts * development of analysis skills of distributed and decentralized computing technologies from different points of view (security, decentralization, performance) * development of the ability to analyze and design governance mechanisms of Decentralized Autonomous Organizations.
Job opportunities	Blockchain and smart contract analyst and developer Distributed Systems Engineer Governance designer Blockchain consultant.
Composition of the research group	1 Full Professors 1 Associated Professors 3 Assistant Professors 1 PhD Students
Name of the research directors	Prof. Francesco Bruschi

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
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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

5.707,20 Euro per 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.

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