









GIOVANI SI

Da un secolo, oltre.

"Pegaso Scholarships are funded with resources of the PR FSE 2021/27 in the frame of Giovanisì (<u>www.giovanisi.it</u>), the project organized by Regione Toscana to help young people become independent."

## **DOCTORAL PROGRAMME**

## IN

## **SMART COMPUTING**

Director prof. Stefano Berretti

## XL cycle – academic year 2024/2025

CUP Pegaso Scholarships 2024 B11I24000190009

TECHNOLOGICAL AREA		
ADMINISTRATIVE OFFICE	Department of Information Engineering	
PARTNER INSTITUTIONS	University of Pisa University of Siena	
	POSITIONS AVAILABLE: 9 Positions with scholarship: 8 Positions without Scholarship: 1* * standard ranking only	
RANKING LIST FOR STANDARD POSITIONS SCHOLARSHIPS AVAILABLE: 7	<ul> <li>2 - University of Florence</li> <li>1 - University of Pisa</li> <li>1 - University of Siena</li> <li>3 - Regione Toscana Pegaso Scholarships 2024</li> </ul>	
RANKING LISTS FOR POSITIONS WITH SPECIFIC RESEARCH TOPICS SCHOLARSHIPS AVAILABLE: 1	Regione Toscana Pegaso Scholarships 2024 <sup>**</sup> Thematic: "Al for Quantitative Evaluation" ** For Regione Toscana Pegaso Scholarships 2024 a period of training/research in an enterprise, a public research institution or other public institution (not a university) of at least 3 months is mandatorily required.	
STUDY/RESEARCH PERIODS ABROAD	<ul> <li>6 months for Pegaso Scholarships 2024 in standard ranking</li> <li>3 months for ordinary scholarships</li> <li>3 months for Pegaso scholarship with specific research topics</li> <li>3 months for the position without scholarship</li> </ul>	
DOCUMENTS REQUIRED FOR THE ADMISSION	<ul> <li>Copy of the Identification Document</li> <li>Self-declaration for qualifications obtained in Italy (laurea triennale, specialistica o magistrale o ciclo unico) with a list of all exams taken and their marks, title of the thesis and graduation mark (download the form <u>here</u>, make sure you fill in all the fields)</li> </ul>	

	• Qualifications obtained abroad (Bachelo combined cycle Degree) with a list of all exar of the thesis and graduation mark. The same documentation except for the final mark m graduate by the 31/10/2024	ns taken and <sup>-</sup>	their marks, tit	le
DOCUMENTS REQUIRED FOR THE EVALUATION	<ul> <li>MANDATORY</li> <li>Curriculum vitae</li> <li>Abstract of the M.Sc. thesis</li> <li>Research project</li> </ul> OPTIONAL <ul> <li>List of publications and any other qualification document</li> <li>PDF copy or a chapter of the M.Sc. thesis (if available)</li> </ul>			
	The research proposal should be written in English and should be submitted as a PDF file. The length may not exceed 12,000 characters. The research proposal should describe a three years project having a high potential for a novel scientific contribution in any area related to smart computing. In the proposal, the candidate should briefly summarize the state-of-the-art, identify one or more open problems, explain why solving these open problems is significant, and describe a research plan, possibly addressing the associated risk factors and strategies for dealing with them.			
RESEARCH PROJECT	The research proposal will not be used to bound the research in any particular area; it just serves the purpose of assessing the candidate's technical writing skills, the ability to envision sensible long-term research goals, and the ability to plan and evaluate research activities. The candidate may present the same project for the standard scholarship and for any scholarship with specific research topic and separate ranking lists he/she intends to apply to, or alternatively may present different projects for each scholarship, indicating clearly to which scholarship each project refers.			
FURTHER INFORMATION	Thematic of interest are listed in the section below "Topics for the research project and the interview". Additional thematic of interest are listed at: <u>smartcomputing.unifi.it/procedures.html#positions</u>			
INTERVIEW MODE	<b>Remotely</b> The interview can be taken in Italian or in English language. If in Italian, the English language knowledge is tested during the interview.			5
EVALUATION MARKS	Parameter Curriculum vitae, academic career,	minimum score	maximum score	
	Curriculum vitae, academic career, publications, qualification documents Research proposal	27/120	40/120 40/120	
		27/120	40/120	

	Applicants who obtain a mark of at least 54/120 according to the minimum score for each parameter will be admitted to the interview		
	Interview (including a discussion of the research proposal) 26/120 40/120		
	Eligibility is achieved with a minimum score of 80/120		
TOPICS FOR THE RESEARCH PROJECT AND THE INTERVIEW	<ul> <li>Artificial Intelligence</li> <li>Computer Networking</li> <li>Computer Vision</li> <li>Computer Graphics</li> <li>Computer Architectures</li> <li>Conversational Agents</li> <li>Data Analysis and Social Network Data Analysis</li> <li>Fog/Edge computing in IoT</li> <li>Embedded and Cyber-physical Systems</li> </ul>		
	<ul> <li>Machine Learning</li> <li>Neuroinformatics</li> <li>Pervasive Sensing &amp; Computing</li> <li>Quantitative evaluation and verification of concurrent systems</li> <li>Security and Privacy in Smart Systems</li> <li>Software architectures and engineering methods</li> </ul>		
Further information availab	le at the following web page: http://smartcomputing.unifi.it/		

EXAMINATION SCHEDULE					
	DATE	TIME			
INTERVIEW	September 17 <sup>th</sup> , 2024	10:00 am			
The list of candidates adm web page: https://www.u	itted to the interview and the final ranking will nifi.it/p12693.html	be published at the following			