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

DOCTORAL PROGRAMME

IN

SMART COMPUTING

Director prof. Stefano Berretti

XXXIX cycle – academic year 2023/2024

CUP Pegaso Scholarships 2023	B11I23000170006

TECHNOLOGICAL AREA	
ADMINISTRATIVE OFFICE	Department of Information Engineering
PARTNER INSTITUTIONS	University of Pisa University of Siena
	POSITIONS AVAILABLE: 9 Positions with scholarship: 9 Positions without Scholarship: *not available*
RANKING LIST FOR STANDARD POSITIONS SCHOLARSHIPS AVAILABLE: 7	**2** - University of Florence **1** - University of Pisa **1** - University of Siena **3** - Regione Toscana Pegaso Scholarships 2023
RANKING LISTS FOR POSITIONS WITH SPECIFIC RESEARCH TOPICS SCHOLARSHIPS AVAILABLE: 2	**1 - Regione Toscana Pegaso Scholarships 2023*** **Thematic:** "Automated Decomposition and quality Assessment of Monolithic systems into microservices for manufacturing districts". **1 - LEONARDO S.p.A.** **Thematic:** "Use of neuromorphic sensors in the detection and recognition of fast moving subjects". ** For Regione Toscana Pegaso Scholarships 2023 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	**- 6 months** for Pegaso Scholarships 2023 in standard ranking **- 3 months** for scholarships **- 1-3 months** for Pegaso scholarship with specific research topics
DOCUMENTS REQUIRED FOR THE ADMISSION	• Copy of the Identification Document

<table>
<tr><td></td><td>

- 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 **here,** make sure you **fill in all the fields**)
- Qualifications obtained abroad (Bachelor's and Master Degrees or combined cycle Degree) with a list of all exams taken and their marks, title of the thesis and graduation mark.

The same documentation except for the final mark must be submitted by those who will graduate within the 31/10/2023
</td></tr>
<tr><td>DOCUMENTS REQUIRED FOR THE EVALUATION</td><td>

MANDATORY

- Curriculum vitae
- Abstract of the M.Sc. thesis
- Research project

OPTIONAL

- List of publications and any other qualification document
- PDF copy or a chapter of the M.Sc. thesis (if available)
</td></tr>
<tr><td>RESEARCH PROJECT</td><td>

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, 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.

The research proposal will not be used to bound the research in any particular area; it just serves the purpose of assessing the candidate 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 intend to apply to, or alternatively may present different projects for each scholarship, indicating clearly to which scholarship each project refers.
</td></tr>
<tr><td>FURTHER INFORMATION</td><td>Thematic of interest are listed in the section below "Topics for the research project and the interview". Additional thematic of interest are listed at: smartcomputing.unifi.it/procedures.html#positions</td></tr>
<tr><td>INTERVIEW MODE</td><td>

Remotely

The interview can be taken in Italian or in English language. If in Italian, the English language knowledge is tested during the interview.
</td></tr>
<tr><td>EVALUATION MARKS</td><td>

<table>
<tr><th>Parameter</th><th>minimum score</th><th>maximum score</th></tr>
<tr><td>Curriculum vitae, academic career, publications, qualification documents</td><td>27/120</td><td>40/120</td></tr>
</table>
</td></tr>
</table>

	<table><tr><td>Research proposal</td><td>27/120</td><td>40/120</td></tr><tr><td colspan="3">Applicants who obtain a mark of at least 54/120 according to the minimum score for each parameter will be admitted to the interview</td></tr><tr><td>Interview (including a discussion of the research proposal) in English language</td><td>26/120</td><td>40/120</td></tr><tr><td colspan="3">Eligibility is achieved with a minimum score of 80/120</td></tr></table>
TOPICS FOR THE RESEARCH PROJECT AND THE INTERVIEW	• Artificial Intelligence • Computer Networking • Computer Vision • Computer Graphics • Computer Architectures • Conversational Agents • Data Analysis and Social Network Data Analysis • Fog/Edge computing in IoT • Embedded and Cyber-physical Systems • Machine Learning • Neuroinformatics • Pervasive Sensing & Computing • Quantitative evaluation and verification of concurrent systems • Security and Privacy in Smart Systems • Software architectures and engineering methods
Further information available at the following web page: http://smartcomputing.unifi.it/	

EXAMINATION SCHEDULE		
	DATE	**TIME**
INTERVIEW	September 15th, 2023	10:00 a.m.
The list of candidates admitted to the interview and the final ranking will be published at the following web page: https://www.unifi.it/p12398		