UNIVERSITÀ DEGLI STUDI FIRENZE

DOCTORAL PROGRAMME

IN

SMART COMPUTING

Director prof. Stefano Berretti

XXXVIII cycle – academic year 2022/2023

TECHNOLOGICAL AREA	
ADMINISTRATIVE OFFICE	Department of Information Engineering
PARTNER INSTITUTIONS	University of Florence University of Pisa University of Siena
	POSITIONS AVAILABLE: 5 Positions with scholarship: 4 Positions without Scholarship: 1
SCHOLARSHIPS: 4	**2** - University of Florence **1** - University of Pisa **1** - University of Siena
STUDY/RESEARCH PERIODS ABROAD	1-3 months
DOCUMENTS REQUIRED FOR THE ADMISSION (under penalty of exclusion)	• Copy of the Identification Document • 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 31/10/2022*
DOCUMENTS REQUIRED FOR THE EVALUATION	**MANDATORY** • Curriculum vitae • Abstract of the M.Sc. thesis • Research project **OPTIONAL** • List of publications and any other qualification document

<table>
<tr><td></td><td>PDF copy or a chapter of the M.Sc. thesis (if available)</td></tr>
<tr><td>REFERENCE LETTERS</td><td>A section is provided in the online application to specify the e-mail addresses of two professors/researchers willing to provide information about candidates training path and activities performed within a scientific field related to the Ph.D. course.</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.</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 (Videocall)

The interview can be conducted in English language</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>
<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>
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</td></tr>
<tr><td>TOPICS FOR THE RESEARCH PROJECT AND THE INTERVIEW</td><td>Artificial Intelligence
Computer Networking
Computer Vision
Computer Architectures
Conversational Agents
Data Analysis and Social Network Data Analysis
Fog/Edge computing in IoT
Embedded and Cyber-physical Systems
Machine Learning</td></tr>
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	• 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	August 23rd 2022	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/p12202.html		