### PhD programme “Regionale pegaso” joint with the University of Pisa, University of Firenze and University of Siena

**President:** Prof. Paolo Ferragina  
**Department:** Department of Informatica – Largo B. Pontecorvo 3 56127 Pisa

**Admission requirements:** Any Master’s degree

**Outcome of the selection procedure:** - Ranking of candidates for the whole PhD programme

**PhD Positions Available**

<table>
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<tr>
<th>Positions available</th>
<th>18</th>
<th>of which:</th>
<th>14 with grant</th>
<th>4 without grant</th>
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<tbody>
<tr>
<td>Details:</td>
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<tr>
<td>6 grants financed by University of Pisa</td>
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<td>2 grants financed by Regione Toscana funded on the POR FSE 2014-2020 resources, in the frame of Tuscan Regional project Giovanisi (<a href="http://www.giovanisi.it">www.giovanisi.it</a>), aiming at enhancing young people's autonomy (with 6 months stay abroad)</td>
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<td>1 grant financed by Regione Toscana funded on the POR FSE 2014-2020 resources, in the frame of Tuscan Regional project Giovanisi (<a href="http://www.giovanisi.it">www.giovanisi.it</a>), aiming at enhancing young people's autonomy (“International” with 12 months stay abroad)</td>
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**Selection criteria:**

### Curriculum

The curriculum, signed and accompanied by a copy of a valid identification document, shall be uploaded only during the application process. The curriculum must provide information about the candidate’s academic education as well as his/her professional and research experience. The candidate shall attach all documents useful for the assessment of his/her curriculum.

Candidates are required to upload their documents: transcripts of the exams, the Master’s thesis or some parts of it, the list of any other training and/or research experiences in Italy or abroad; prizes or awards. It is also advisable to highlight research, training and/or professional experiences related to the topic Industry 4.0, Big Data e/o Cyber-security.

In the online application process the candidate shall also indicate, the names and contacts (email address and phone number) of two professor or academic/researcher of Computer Science available to provide references which are to be uploaded by July 25th, 2018 following the instructions provided by e-mail.

**Minimum grade: 30 out of 40**

### Interview

The interview will assess the candidate’s knowledge, her/his aptitude for research, openness to academic experiences in Italy and abroad and an interest in scientific deepening. During the interview, the Selection Boards will assess the English Language Proficiency Level.

**Date:** 6th September 2018  **Time:** 9.00 a.m. (Italian Time)  **with the possible prolongation to the following day/s (excluding Saturdays or Sundays).**

All candidates shall be present on the first day of meetings to ascertain the interview schedule (except for video conference interview).

**Venue:** Department of Informatica – Largo B. Pontecorvo 3 56127 Pisa

Candidates must also demonstrate, during the interview, to have an adequate proficiency level of English (equivalent to at least level
Furthermore, the candidates must certify the abovementioned proficiency before accepting the "Pegaso" study grant by means of:

1. internationally recognized certification (eg. Cambridge English Language Assessment, TOEFL, IELTS) at the B2 level of the Common European Framework for Languages (cfr. http://www.cli.unipi.it/files/equipollenze/inglese_equip?lang=it);  
2. Certification of a Language Centre of the any Italian or foreign university;  
3. certification issued by the Language Centre (CLI) of Pisa University, which, upon appointment, provides monthly session’s language proficiency certification.

**Minimum grade: 40 out of 60**

**Webconference**: YES

Candidates who choose the videoconference will have to send the filled form (Attachment D) to concorsodottorato@unipi.it, within the deadline of the announcement. It is also mandatory to send the letter (Attachment D1) duly signed by The Rector of a University or by the Director of a Department or by the Responsible of an official Institution (eg. Embassy, Consulate). In particular, the letter must contain the name of a professor or public official who will be present during the interview, thus ensuring its regularity.

**Guidelines for the presentation of the PhD Research project**

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<th>Required:</th>
<th>YES</th>
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The candidate must upload the research project during the online application process within the deadline of the announcement. The research project will be discussed by the candidate during the interview in order to highlight the capacity his/her project planning capabilities.

The research project must indicate the research areas of interest of the candidate and must include a brief description of the scientific activities carried out and the reasons The reasons why you are going to access the PhD course. The candidate is asked to point out any scientific and/or application links with the theme "Industry 4.0", Big Data e/o Cyber-security.

The description of the research project should not be longer than 4000 characters (excluding spaces).

**INFO:**

**Overview and objectives of the PhD course:**

The PhD in Computer Science aims to train researchers and innovators in Information Science and Technology. For this purpose, PhD students are involved since the beginning in the research activities carried out in the proponent Departments, they are invited to attend monographic courses and international PhD schools, as well as to spend study and research periods in academic and industrial laboratories and research centers in Italy and abroad. Specific attention will be devoted in the PhD courses and
research activities onto the main multidisciplinary areas in which ICT is involved and contributes, and for which the PhD in Computer Science already has successfully trained researchers and established strong relationships for research projects, internships and job placements with prestigious ICT companies worldwide in the area of BioInformatics and Smart Health, Big Data and Web, Smart Communities and Industry 4.0, Cyber-security etc. At the end of the PhD, students will be able to contribute to the definition of new models and theories for computation and information processing; new systems, algorithms and platforms for the organization, storage and use of (Big) data; new languages and tools to support emerging programming paradigms, such as the ones in the area of Artificial Intelligence, Machine Learning Big Data, ICT infrastructures (e.g. Datacenter, Internet of Things, Cloud and Fog computing, ecc.), Cyber Security, etc. Additionally, they will be able to exploit the opportunities offered by the ICT in techno-social networks; promote and master the interdisciplinary dialogue; analyze complex systems at scientific, biological and social level; understand and guide the impact of ICT innovations in these areas. Eventually our PhD students will have the opportunity to attend the PhD+ course on “Research Valorization, Innovation and Entrepreneurial mindset”, launched by UniPI since 2011, teaching and training students on those soft skills with seminars on business modeling and planning, IP protection and valorization, communication tools and techniques, fund raising from public and private bodies, start-up creation, and so on.

Website:
https://www.di.unipi.it/phd