

Research and Internationalization Service





Announcement of competition for two PhD positions (36 months each) - XXXV cycle (academic year 2019/2020) -at the Department of Theoretical and Applied Sciences of the University of Insubria in the frame of the Marie Skłodowska-Curie Innovative Training Network (ITN) "Real-time Analytics for the Internet of Sports" (RAIS) funded by the European Commission (Grant agreement no: 813162)

Item 1. Admission requirements

The positions are open to candidates of any nationality, as long as they fulfill the requirements for the Early Stage Researchers (ESRs) funded by Marie Skłodowska-Curie actions:

- (1) Candidates who have already obtained a Ph.D. degree, or have more than 4 years of research activity (measured from the date when the researcher obtained the degree which would formally entitle him or her to embark on a doctorate in the country in which the degree was obtained), are not eligible.
- (2) Researchers must not have resided or carried out their main activity (work, studies, etc.) in Italy for more than 12 months in the 3 years immediately prior to the date of appointment

The ideal candidates must have a strong background in privacy and security, strong programming and analytical skills, excellent knowledge of English and a proven commitment to their studies.

The applicants must have acquired (or obtain it before 1st October 2019) a Master Degree diploma giving access to doctoral studies in Computer Science in the Country where the diploma was earned (typically a Master degree in Computer Science or Engineering).

Item 2. Goals of the RAIS project

Over the past few years, we have been witnessing an increasing presence and usage of wearable sensing and quantified- self devices. The rise of embedded and wearable computing is expected to bring the next revolution of the Internet of Sports, enhancing fitness, performance health, productivity and safety as well as creating new jobs and

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opening new markets. Nevertheless, at a European level, there is a recognized shortage of highly skilled researchers, scientists and engineers with transferable skills and entrepreneurial experience, trained in building IT platforms and service infrastructures capable of hosting innovative collective sensing services and applications. The RAIS consortium comprising 6 beneficiaries and 7 fully committed partner organizations, aspires to establish the core for a fertile multidisciplinary research and innovation community with strong entrepreneurial culture that will advance: 1) wearable sport-sensing and quantified-self devices and accompanying middleware; 2) technologies for Big Data mining and analytics that are needed to capture a broad range of users' sports- and wellness-related information. The main objective of RAIS is to provide world class training for a next generation of researchers, computer scientists, and data engineers, emphasizing a strong combination of advanced understanding in both theoretical and experimental approaches, methodologies and tools that are required to develop decentralized, scalable, and secure collective sensing infrastructures and platforms.

Early Stage Researcher 1 (ESR)

PhD Project Title: User centered personal data management.

PhD Project description: The ESR will focus on a user-centric model of managing personal data, enabling individuals to collect and manage into a single logical vault the personal information they are producing through different wearable devices. In particular, the project consists in the design of a secure logical vault supporting fine-grained information sharing driven by user's privacy; the development of data mining and learning tools able to: automatically adjust user privacy settings when new devices enter the personal pervasive ecosystem, and adapt privacy settings to change with minimal user intervention. We seek candidates with experience and research interests in one or more of the following topics: privacy, trust, machine learning, distributed data management.

Early Stage Researcher 2 (ESR)

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PhD Project Title: Blockchain based distributed secure data management.

<u>PhD Project description</u>: The ESR will focus on the design of a distributed secure data storage architecture and related strategies for distributed secure computation and sharing of personal data, leveraging on blockchain as the framework facilitating secure distributed transaction processing and coordination. We seek candidates with experience and research interests in one or more of the following topics: blockchain, privacy, security, cryptography, distributed data management.



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Academic Supervisor

Prof. Dr. Elena Ferrari, Università degli Studi dell'Insubria, Department of Theoretical and Applied Sciences

The e-mail addresses <u>elena.ferrari@uninsubria.it</u> and <u>barbara.carminati@uninsubria.it</u> can be used for informal enquiries regarding the project.

Start date

The expected start date of the Marie Sklodowska Curie Actions Grant is 1 st October 2019.

Item 3. Applications

The application for admission to PhD studies shall be submitted by the deadline of 4th **June 2019, 12 pm (CET)**. Candidates must apply, exclusively on-line, connecting to the web site of the University of Insubria (www.uninsubria.it) from any personal computer. After the mentioned deadline the on-line application procedure will be deactivated. To access the on-line procedure candidates must follow the link "Servizi Web – Segreterie Studenti" (Web Services – Student affairs section) from the website www.uninsubria.it If you already have a user ID and password you can access web services logging in and choosing "Test di ammissione" (admissions test) and follow the instructions. Those who do not possess access credentials must register by selecting "Registrazione" (register), then go to "login", then select "test for admission" and follow the instructions. Candidates, during the on-line registration, must:

- Enter personal data, residence, domicile and telephone number, ID number, e- mail address, degree data, knowledge of languages other than Italian.
- Choose the Computer science and computational mathematics PhD course and the foreign language among the eligible ones indicated in annex 1
- Upload a scan of the qualifications needed for the PhD course (see annex 1), and of 3 recommendation letters.
- Upload a scan of the ID.

All the uploaded files must be in .pdf format not exceeding 5MB. Each uploaded file must be nominated with the surname of the candidate and the qualification description (ex. Smith master degree).

Furthermore, foreign applicants and Italian applicants with a foreign qualification must upload:

- Diploma and transcript of records legalized and officially translated by the Italian Diplomatic body (Embassy or Consulate) in the country where the qualification has been attained;
- "Dichiarazione di Valore in Loco" issued by the Italian Diplomatic body (Embassy or Consulate) in the country where the qualification has been attained;
- Diploma Supplement, if available.

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Those who fail to obtain the required documentation by the application deadline may be admitted with reserve. However, they are mandatory required to deliver the academic degree, translated and legalized and the value statement by the date of the enrollement into the Phd Program (i.e., 1st October 2019).

Within the deadline candidates may access their on-line application and, if necessary, modify the submitted documents. After the deadline no further integration to the application will be admitted. Candidates must upload a list of the qualifications uploaded for the PhD course and they will not be required to be physically present during the qualification assessment.

Please note that the entry of false or incorrect data (that are not corrected by the deadline), implies the exclusion from the competition.

At the end of the application process, the receipt of the application to the admission test must be printed.

The receipt of the application must be submitted on the day of the test together with the ID document indicated in the on-line application.

In case of difficulties in the online application process, please contact the Research and Internationalization Service (scuola.dottorato@uninsubria.it).

The University assumes no responsibility for any malfunctions due to overloading of networks or application systems.

Admitted Candidates list

After the application deadline and the appropriate checks, a list of Candidates having correctly applied before the deadline will be published on the webpage: www.uninsubria.it/bandodottorati

Disabled Persons

In order to provide all the necessary assistance and determine any additional time required for the completion of the examination in relation to the specific disability (according to item 20 of the Law 104/92, integrated and amended by law 17/1999), candidates with disabilities must submit by the deadline to a suitable certification. At the University of Insubria a Disabled Students Service is available, open every Monday and Tuesday, from 10.00 a.m. to 12.00 in the seat of Via Ravasi, 2 - Varese and Wednesdays from 10.00 a.m. to 12.00 in the seat of Via Sant'Abbondio, 9 - Como. In both seats students are received upon appointment. Additional Information is available on the webpage www.uninsubria.it/web/serv-disabili.

Results

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The list of admitted candidates will be officially published on the website www.uninsubria.it/dottorati

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Item 4. Evaluation Committee and Examinations

The Evaluation Committee is composed of three members chosen among professors and researchers of the University and, if necessary, of external experts. The Committee gives to each candidate up to a maximum of 60 points for each of the two evaluations (qualifications assessment and oral test). Oral tests are public and are considered passed if the candidate gets a score of no less than 40/60 points. The test results will be notified by means of an official publication of the ranking on the website of the University (www.uninsubria.it/bandodottorati). The publication replaces any personal communication.

Assessment Criteria:

up to 60 points for the qualification assessment:

- Curriculum studiorum (graduation final mark or, for candidates awaiting the attainment of the Master's Degree, Self certification or certification of the English transcript of records of the Master's curriculum with dates and marks (max 30 points);
- publications on topics relevant for the PhD program (max 10 points);
- training activities and professional experience relevant for the PhD (max 10 points);
- any other assessable qualification, including language certifications and up to 3 recommendation letters (max 10 points).

Only candidates awarded with a minimum of 40 points for the qualification assessment will be admitted to the interview. The interview will assess the motivations of the candidates for applying to this specific PhD program, their scientific interest and the ability to carry on research in the field of the Phd Projects.

The interview, which can be evaluated up to a maximum of 60 points, will also test a strong background in privacy and security, strong programming and analytical skills, excellent knowledge of English and a proven commitment to PhD studies.

Videoconference

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Candidates may request to be interviewed remotely by videoconference or any other technology enabling remote communication, by sending an email to Prof Barbara Carminati barbara.carminati@uninsubria.it.

Applicants should specify whether the connection will be through video conferencing services of the University (international standard H.323) or Skype.

Candidates must indicate their email address and the Skype account if they chose this option.

In the case of video conferencing services offered by the University, a link needed to download and install a terminal h.323 software, interfaced with the University IT system and credentials to access it, will be sent to the candidate's email address. Few days before

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the interview, it will be necessary to make at least two link tests (an independent test with auto responder and a qualitative test with the University staff).

If connecting by Skype the candidate might be excluded from the competition if the personal account has not previously provided. If using the university video conferencing system, applicants might be excluded if not logging in according to the time and the modalities agreed with the Committee. Furthermore, candidates might be excluded in case of connection failure, absence of the candidate or if the candidate does not show a valid ID. The University of Insubria disclaims any responsibility in the eventuality of technical issues compromising a regular interview.

Item 5. Course Enrollment

Candidates will be admitted to the courses according to the final ranking and the number of available places for each PhD course. Eligible candidates not completing their enrollment by the deadline, will be excluded. The competent offices will proceed further in the ranking giving formal notice to the parties concerned.

The rankings will be published on the website of the University (www.uninsubria.it/bandodottorati). The publication replaces in all respects any personal communication. Candidates are requested to view the ranking, the possible scrolling of the ranking list and the peremptory terms of registration, in the notices published on the website www.uninsubria.it/bandodottorati.

Item 6. Marie Sklodowska Curie Actions Grants

The gross EU contribution for an Early Stage Researcher under MSCA-Innovative Training Network foresees a living allowance (adjusted through the country correction coefficient), a mobility allowance and, if applicable at the date of the recruitment in the action, a family allowance. The final amount will not change in case of secondments to another beneficiary of the RAIS project or partner organisation.

Net amount, paid on a monthly basis, results from deducting all compulsory social security contributions. All allowances will be recognized according to Marie Sklodowska Curie Actions rules stated in the Guide for Applicants:

http://ec.europa.eu/research/participants/data/ref/h2020/other/guides_for_applicants/h2020-guide-appl-msca-itn_en.pdf

Item 7. Incompatibility

The registration to a PhD program is incompatible with the registration to any other PhD program, undergraduate or graduate programs, first or second level master programs, non





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medical specialization programs, in Italy and abroad, with the exception of joint programs agreements.

Item 8. Attendance

The admission to a PhD program implies an exclusive and full time commitment. The Early Stage Researcher is obliged to attend the training activities and with full commitment to programs of study and the assigned research activities. The Teachers Board disciplines the attendance modalities of the PhD.

ESRs, as part of their training program, may perform tutoring activities for Bachelor and Master's students as well as integrative teaching activities. The PhD title is attained at the end of the PhD cycle, once the final examination has been passed implying the submission and the discussion of a written dissertation (thesis) with a scientific research relevance, conducted with method from which important scientific results arise.

The final thesis will be filed in the open access University institutional archive, that will ensure the preservation and public consultation, total, partial, or only in bibliographic data.

Item 9. Tuition fees

All PhD students (assignees and non-scholarships) are required to pay an annual contribution of €156.00

Item 10. Personal data

According To legislative Decree No. 196 of June 30, 2003 ("Code for the protection of Personal data"), and of the general Regulations for the protection of data-EU Regulation 2016/679, the information on the processing of personal data is published on the University website

The university in implementation of the legislation on the subject adopted its three-year plan for the prevention of corruption and appointed the responsible for the prevention of corruption:

https://www.uninsubria.it/amministrazione-trasparente/disposizioni-generali/piano-triennale-la-prevenzione-della-corruzione-e

Item 11. Reference laws

For everything not specifically included in this competition notice, the University of Insubria complies with the legislation in force and the University regulation for the PhD courses.

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Item 12. Recruitment and HRS4R

Recruitment of the ESRs will be in accordance to the European Charter for Researchers (ECR) and the Code of Conduct for the Recruitment of Researchers (CCRR), which provide the overarching framework of guidelines and requirements for the roles, responsibilities and entitlements of such positions, ensuring that selection procedures are open, transparent and merit-based. University of Insubria has been awarded the European Label "HRS4R – Human Resources Strategy for Researchers" in February 2019, therefore it is fully compliant with art. 32 "Recruitment and working conditions for recruited researchers" of the Grant Agreement signed with European Commission.

For information relating to the competition procedures: scuola.dottorato@uninsubria.it

Varese, 24 aprile 2019

The Rector f.to Prof. Angelo Tagliabue

Person in charge of the administrative procedure (L. 241/1990): Dott. Luca Azimonti – scuola.dottorato@uninsubria.it



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Annex 1 to call for the admission to PhD courses – XXXV cycle

COMPUTER SCIENCE AND COMPUTATIONAL MATHEMATICS	
Scientific Area:	Mathematics and Computer Science; Industrial and Information Engineering; Economics and Statistics
PhD Coordinator:	Prof. Barbara Carminati – barbara.carminati@uninsubria.it
PhD Supervisor	Prof. Elena Ferrari
	elena.ferrari@uninsubria.it
Duration:	3 years
Department:	Theoretical and applied Sciences
MSCA grants	2
Assessment:	Interview Only candidates awarded with a minimum of 40 points for the qualification assessment will be admitted to the interview.
Assessment cirteria:	The interview will be focused on the candidate's scientific interests, motivation, and a proposal of an ideal research project; priority will be given to candidates presenting a research project related to the topics of this PhD. The knowledge of English will also be verified.
Calendar:	Date, time and place will be made public at the following address
Assessable Qualifications:	Complete Curriculum vitae, including education data,
	previous research experiences, thesis and publications.



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For candidates awaiting the attainment of the Master's Degree: self certification or certification of the English transcript of records of the Master's curriculum with dates and marks

Self certification or certification of the English transcript of records the Bachelor's Degree with date, type of title and final mark

Publications

Any other useful qualification such as: specialization and postgraduate courses, awards, grants, teaching activities, fellowships, collaboration to research activities.

Recommendation Letters (Max. 3), by University teachers or researchers. The letters will be directly inserted by the candidate between the titles presented in the on-line procedure.



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