

Topic: 15 PhD graduation positions/ Early Stage Researcher (ESR) positions

Applications are invited for 15 full-time PhD student positions (called Early Stage Researchers or ESR) for joint and double PhD degrees for **36 months**. The positions are offered within the **A-WEAR European Joint Doctorate** action of the highly appreciated EU-funded Marie Skłodowska Curie grants. We offer high-class training and the possibility of PhD graduation with double or joint PhD certificate. The positions are fully funded for a 36-month period. You can choose your position in one of five top-level universities in Czech Republic, Finland, Italy, Romania, or Spain and complement your experience within periods of up to 15 months of cross-country and industrial secondments by working with the highly committed industrial partners of the action in the above-mentioned countries. You are encouraged to apply for up to four positions within A-WEAR network if you believe your profile is suitable for multiple topics. A separate application is needed for each position in case you apply for multiple positions.

A-WEAR (www.a-wear.eu) is an international, multidisciplinary and multi-sectorial training network and joint doctorate programme on wearable computing. A-WEAR is funded by the European Union's Horizon2020 research and innovation programme under the Marie Skłodowska Curie grant agreement No. 813278.

The 15 ESR projects are listed below, with links to their full details. Please read their description carefully before applying and choose only those that best suit to your profile. We recommend you to choose the position(s) you apply for based on your technical profile and desired technical expertise, rather than based on the hosting location, as all positions involve high-level cross-country research mobility, as well as industrial mobility.

ESR1. [Energy-efficient edge computing based gateways for wearable networks](#). Employer: Tampere University, Finland. Double PhD degree with Università Mediterranea di Reggio Calabria, Italy

ESR2. [Large-scale crowdsourcing-based wearables data gathering and processing](#). Employer: Tampere University, Finland. Joint PhD degree with Universitat Jaume I, Spain

ESR3. [Privacy-aware approaches for wireless IoT localization on wearable devices](#). Employer: Tampere University, Finland. Double PhD degree with University “Politehnica” of Bucharest, Romania

ESR4. [5G and mmWave capabilities in wearable applications](#). Employer: Tampere University, Finland. Joint PhD degree with Brno University of Technology, Czech Republic

ESR5. [Cloud Platform for context-adaptive positioning and localization on wearable devices](#). Employer: Universitat Jaume I, Spain. Joint PhD degree with Tampere University, Finland

ESR6. [Collaborative techniques for infrastructureless Indoor Positioning Systems](#). Employer: Universitat Jaume I, Spain. Joint PhD degree with Tampere University, Finland

ESR7. [Urban Mobility: balancing usefulness and privacy](#). Employer: Universitat Jaume I, Spain. Joint PhD degree with Brno University of Technology, Czech Republic

ESR8. [Centimeter level accuracy for IoT localization of wearable devices](#). Employer: University “Politehnica” of Bucharest, Romania. Double PhD degree with Tampere University, Finland

ESR9. [Industrial wearables for work safety](#). Employer: University “Politehnica” of Bucharest, Romania. Double PhD degree with Brno University of Technology, Czech Republic

ESR10. [Wearables for ehealth](#). University “Politehnica” of Bucharest, Romania. Double PhD degree with Università Mediterranea di Reggio Calabria, Italy

ESR11. [Low latency machine learning and data mining for wearable devices](#). Employer: Brno University of Technology, Czech Republic. Joint PhD degree with Tampere University, Finland

ESR12. [Reliable and low-latency communication technologies for industrial wearable applications](#). Employer: Brno University of Technology, Czech Republic. Joint PhD degree with Tampere University, Finland

ESR13. [Privacy-enhancing technologies and privacy-enhancing cryptography for wearables](#). Employer: Brno University of Technology, Czech Republic. Joint PhD degree with Universitat Jaume I, Spain

ESR14. [Social-aware discovery and data exchange among IoT devices over Edge Computing platforms](#). Employer: Università Mediterranea di Reggio Calabria, Italy. Double PhD degree with Tampere University, Finland

ESR15. [New Architecture, communication and networking protocols for supporting 5G-IoT wearable devices connectivity](#). Employer: Università Mediterranea di Reggio Calabria, Italy. Double PhD degree with with Universitat Jaume I, Spain

Job Description and Benefits

Starting date for the ESR: Aug-Oct 2019 (to be checked for each position).

Duration of the research employment: 36 months/full-time contract.

Salary: The ESR will receive a Living Allowance and a Mobility allowance (i.e., gross salary) in accordance with H2020 MSCA rules. ESRs who have a family at the beginning of their employment will also receive a family allowance, also according to H2020 MSCA rules. Details about the approximate gross salary per country are given at each position. We emphasize that the salary of each ESR **is very competitive** and it is at levels corresponding to postdoctoral students (or higher) at each employment unit. The salaries are adjusted to the living costs in the countries of each of the participant units, according to H2020 MSCA rules.

Additional benefits: participation to network events, conferences, and workshops; acquiring industrial expertise during the industrial secondment; business and hands-on training; large degree of cross-country academic and industrial mobility; acquiring high competence in terms of innovation, autonomy, integrity, and ethics; benefiting from the interdisciplinary nature of the consortium, gathering together the wearables, wireless communication and localization, geospatial technologies, cybersecurity, digitalization, smart cities, eHealth, and public safety sectors; gaining experience in writing both scientific papers aiming at high impact international journals and flagship international conferences, and social science blog entries on LinkedIn, aiming at a non-technical audience. At the end of their employment in A-WEAR, the ESRs participating in the network will have reached a unique position to become leaders of a growing privacy-preserving smart wearables sector.

Eligibility criteria: please check carefully that you are eligible; all conditions below are compulsory

- **Transnational mobility:** The ESR is required to undertake transnational mobility (i.e. move from one country to another) when taking up their appointment. Nationality is therefore not a criterion. Rather the location of the researcher's residence or main activity during the 3 years prior to their recruitment is determining. The researcher must not have resided or carried out their main activity (work, studies, etc.) in the country of the host organization (Spain/Finland/Romania/Italy/Czech Republic) for A-WEAR for more than 12 months in the 3 years immediately prior to the start date (e.g., September 2019). Note: the mobility rule applies to the (first) beneficiary where the researcher is recruited, and not to beneficiaries to which the researcher is sent or seconded. It is also only determined at one point in time: at the time when the ESR starts working for A-WEAR. If in doubt whether you fulfill the mobility condition, please check at **info.a-wear@tut.fi**
- **Early-Stage Researchers (ESRs)/fresh MSc graduates:** All researchers recruited in A-WEAR must have maximum 4 years since the completion of their first MSc degree and have not been awarded any doctoral degree at the date of the employment. If in doubt whether you fulfill the 'fresh MSc degree' condition, please check at **info.a-wear@tut.fi**
- **Background requirements:** the applicant must be in possession of Master of Science (MSc) diploma in a relevant field, such as: electrical engineering, communications engineering, software engineering/computer science, signal processing, radio communications, mathematics, physics, aerospace engineering, mechanical engineering, biomedical engineering, etc....
- **English language requirements:** the candidate must be in possession of an English certificate with good level according to the regulations of the two universities involved in the double/joint PhD degree (see Additional Information)

Additional Information

- The open mind to learn new things might be the most important personal quality required from any researcher. But this opportunity is widened up largely when working for the Marie Skłodowska Curie grant funded by the European Union. You will have the possibility to work in a foreign country of the host university and other locations in Europe for the companies and other organisations offering the so-called secondments.
- The multi-cultural working environment will offer not only a wonderful learning opportunity via knowledge sharing across Europe, but also the best possible conditions to broaden your views in scientific context and life in general, and especially within the A-WEAR and to grow in becoming independent scientists and to have the best possible assets for future scientific as well as industrial career perspectives.
- The candidates must submit through <http://a-wear.uji.es/online-application/candidates> the followings
 - **Certified copies of the bachelor's and master's degree certificates and the transcripts** with official translations into English (if the original documents are in a language other than Finnish, English, Romanian, Czech, Italian, or Spanish).
 - **A Diploma Supplement (DS)** as approved by the EU Commission for degrees completed in European universities (when applicable)
 - **English language certificate**
 - IELTS Academic (min. score 6.5)
 - TOEFL (min. score 92 in iBT and 580 in PBT)
 - PTE Academic (min. score 62)
 - Cambridge Language Certificate (Proficiency CPE or Advanced CAE) (min. score C)
 - **Curriculum Vitae/CV** (preferably in Europass format)
 - **List of publications (if any)**
 - **References:** minimum 2 reference letters to be attached to the application and contact details of 2 or more referees included in the CV
 - **Motivation letter:** maximum 1 page where you introduce yourself and present your qualifications; you may include also your previous research fields and main research results. Please emphasize your future goals career-wise
 - **A short essay called “Dissertation Proposal” (max 2 pages)** explaining how you would address the research objectives mentioned at the position you apply for (e.g., methodology, desired inputs in terms of equipment and supervision, ideas you have regarding the topic, software tools that you are planning to use to address the research objectives, etc.).
 - **Copy of the passport**
 - **Proof of residence:** Statement (use template available at: <http://a-wear.uji.es/online-application/candidates/template/residence5years-cert.docx>) and certificates/documents demonstrating your residence(s) in the last 5 years
- The applicants may select **up to four positions** that interest them within the network. For each selected position, a different essay is required, fine-tuned to the position you apply for. If the applicant is selected for more than one position, the order of preference in the application will be taken into account.
- When hiring people respecting ethical aspects is highly important in science. It means that equal opportunities as well as gender balance are considered, according to the EU initiatives

Selection process

A-WEAR selection of candidates will be based on a clear, transparent, and open-competition recruitment process, taking into account the gender balance and equal opportunity rules.

After the initial eligibility screening, the A-WEAR recruitment committee will preselect candidates based on their previous training, grades and relevance of their BSc and MSc degrees, list of publications (if any), work experience, positive attitude, capability of work in a team, references, quality and relevance of the Dissertation Proposal, previous mobility experience, language skills, and motivation. The most promising candidates are invited to one or several interviews via teleconference or in person. Candidates will be interviewed jointly or successively by the supervisors from the consortium and their level of English writing skills might be formally tested. At the end of the evaluation process, the recruitment committee will decide which candidates to select for each project, taking into account the candidates' preferences and potential. In case of equal qualifications between a male and a female candidate for the final position, the balance at network level will affect the decision. We strive to improve the gender balance in our research groups and encourage female candidates to apply.

Selection criteria

- Study records Bsc + Msc (20%)
- Work & research experience (15%)
- Motivation (20%)
- Clarity, relevance, innovativeness, and technical soundness of the 'Dissertation Essay' (25%)
- Letters of recommendation (10%)
- Positive attitude, previous mobility experience, good communication skills (10%)
- English proficiency: fail/pass criterion

Double versus joint PhD degree

There is little difference between joint and double degrees from the PhD' student perspective. A double or a joint degree is based on the collaboration between two universities on a common PhD project on the basis of a mutual binding collaboration agreement. Based on a single PhD thesis submitted to both universities for assessment, a successful completion of a joint degree program will award a single (joint) PhD diploma recognized by both universities, while a successful completion of a double degree will award two PhD diplomas – one from each university.