



EU-H2020 MSCA-ITN-2020



Call for applicants

Project Name: Aerial Robotic Training for the next generation of European infrastructure and asset maintenance technologies

Acronym: AERO-TRAIN

Project no.: 953454

Start date of project: 01/01/2021

Duration: 48 Months

The AERO-TRAIN Consortium

This project has received funding from the European Union's Horizon 2020 research and innovation programme under the Marie Skłodowska-Curie grant agreement 953454



About the project

Do you want to be part of a vibrant training network on Aerial Robotics? Do you want to be one of the Early-Stage Researchers (ESR) that will fill the technological and scientific gaps between aerial robotics and the Operations & Maintenance (O&M) industry, thus making an impact for society and the industry? Do you believe that the potential of aerial robots is yet to be unleashed, and you want to be at the forefront of this technological innovation?

Apply now to one of the 15 PhD positions available through the Marie Skłodowska-Curie ITN AERO-TRAIN European Training Network and hosted by top universities and research centres across Europe.

The AERO-TRAIN project aims to close the gap between the Infrastructure Operations & Maintenance industry and aerial robotics, with the ambition to keep our invaluable assets operational and safe. Moreover, the project addresses the challenging problems of human-machine interface (e.g., immersive technology, augmented reality) for enhanced remote aerial manipulation and inspection evaluation. Furthermore, the project aims to develop new approaches for improving the robustness of aerial manipulators under conditions that reflect real situations. The project is carried out by a consortium of 14 academic and industrial organizations from Denmark, Sweden, Norway, Finland, Spain, Italy and Switzerland. You can find more information about the project on the project's homepage: www.aerotrains.eu

About the 15 positions and where to apply

A total of 15 PhD positions will be opened, hosted by 8 of the organizations participating in the AERO-TRAIN project. The titles of the different PhD projects are available on the website (<https://www.aerotrains.eu/esr-projects>), where you can also find a project description and the link for applying to each of them. Note that you will be redirected to the vacancy page of the hosting organization.

To increase your chances of being selected, we encourage you to apply to up to 3 of the 15 positions.

Why applying?

If you are interested in scientific and technological topics such as aerial robotics, intelligent mechatronics, autonomous robots, human-robot interaction, AI, and the like, as well as if you want to fill the gap between academic research and the industry, then you should apply for one or multiple positions available in the AERO-TRAIN project!

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Being one of the selected applicants means that you will:

- participate in the most advanced training in the field of aerial robotics,
- be part of a network of universities, research institutes and industrial high-tech companies,
- you will have the opportunity to visit multiple diverse environments within the network,
- develop both your scientific and general skills,
- be recruited by one of the most renowned universities and research institutes in Europe, and you will have access to their facilities, equipment and labs,
- work on your own project, while also contributing to the advancement of aerial robotic technologies through a strong collaboration with the other PhD students,
- work with experts in the O&M industry, and you will have the opportunity to spend a secondment period at their premises, where you can develop and apply your competences to solve real life problems,
- have the possibility to disseminate your results in research dissemination events (conferences), as well as industry events, where you will meet external stakeholders to whom you can pitch your project and unique technology.

Who are we looking for?

As an ESR applicant, you should:

- have an academic background in relevant fields such as Engineering Technology, Electrical and Computer Engineering, Physics, Industrial Engineering, Information Technologies or related fields,
- have excellent methodological skills, an analytical mind-set and the ability to work both independently and as a member of a research team. You are proactive, willing to learn, and you have self-management skills.

Furthermore:

- You are highly motivated, ambitious and enthusiastic about research, and you have an inner drive to develop a career in Science & Engineering.
- You have outstanding communication skills in English, both oral and written.
- You enjoy working in a team, with colleagues from different backgrounds, both within the group at your host organization and within the other participating organizations.

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- You are willing to travel and be part of different international research environments for several months.

Employment conditions and working environment

- The selected candidates will be hired at the host institution holding the PhD vacancy for up to 36 months.
- As an ESR within the AERO-TRAIN project, you will receive an employment contract from the host institution, which includes several employment benefits, such as paid vacation, pension contribution and social security.
- You will receive a competitive gross salary according to the program regulations depending on the country of employment, subject to taxation in compliance with each National Law.
- You are entitled to a family allowance, if you have family ties at the time of recruitment. Family ties refer to persons linked to the researcher by marriage, a relationship with equivalent status to a marriage (recognised by the legislation of the country where this relationship was formalised), or dependent children who are being maintained by the researcher.
- Where applicable, your employer will assist you in administrative procedures related to your recruitment within the project, for example in obtaining a visa.
- You have budget for work-related travel, books, and tuition.
- You will have the opportunity to spend a secondment period in a different research and/or industrial organization within the AERO-TRAIN network.
- You will be part of a unique and ambitious training program in the field of Aerial Robotics for Operations and Maintenance and related areas (AI, computer vision, immersive technologies, teleoperation, human-robot interaction and the like). You will take part in several events, including training schools, technology training, secondments, integration weeks and participation to a grand challenge.
- The expected start date for the positions is May-September 2021. The date is negotiated with each candidate separately. The terms and conditions of the contract will be established according to the specific legislation on the country of employment.

Eligibility Criteria:

To be eligible for recruitment, you must comply with the following requirements:

- At the time of recruitment, the applicant must not have resided or carried out his/her main activity (work, studies, etc.) in the country of the host institution for more than



12 months in the 3 years immediately prior to his/her recruitment. Short stays, such as holidays, are not considered.

- The applicant is an Early-Stage Researcher, meaning that at the time of recruitment, the selected candidate is in the first four years (full-time equivalent) of their research careers. This is measured from the date when they obtained the master's degree, or an equivalent degree.
- Applicants are not eligible if they have already been awarded a PhD.
- Candidates may apply prior to obtaining their master's degree but cannot begin before having received it. That means that you are eligible if you are expected to graduate no later than September 2021.

In some cases, additional requirements (e.g., internationally recognized English language qualifications achieved) and/or selection procedures based on local regulations might be needed.

All interested applicants meeting the eligibility requirements, irrespective of age, gender, race, disability, religion or ethnic background are encouraged to apply.

Assessment of applicants

Applicants should apply to the vacancies opened by the host institutions. To increase your chances to be selected, we recommend you to include the following documentation:

- An up-to-date CV
- A cover letter describing your motivation for applying for the position and the relation to your prior experience.
- A project proposal for the position (max 2 pages). Proposals can include a research statement, a short plan related to the position, a plan for publications and research risk management.
- A list of degrees and grade transcripts.
- Proof of English proficiency, such as an English certificate (TOEFL or similar), a high school diploma showing English grades, graduation diploma from an education you took in English, a substantial single author publication in English, your master's thesis or other substantial text authored in English).
- The position for which you apply is part of a call for 15 candidates within the AERO-TRAIN project. If you have applied or are planning to apply to any of the other positions, please provide a statement containing all the positions you applied for and rank them according to your preferences.
- A full list of scientific and technical publications, awards and certifications that are relevant for the vacancy.

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- Up to 3 relevant publications in related scientific fields.
- Up to 3 reference letters.

The candidates will be selected based on their merits in the fields related to the expected ESR area of expertise. For each position, a selection committee will be appointed to evaluate all applications, based on the submitted documents. The selection committee may involve external experts within the AERO-TRAIN consortium to support the evaluation of candidates.

The best applicants will be shortlisted and invited to an interview (most probably online). A second interview may be planned thereafter if the committee considers it necessary. After a final check of the eligibility criteria by the project coordinator, the selected candidate will start the recruitment process with the host institution.

Note that your data will be made available to the AERO-TRAIN partners for the purpose of conducting the assessment of all candidates.

When can I hear if I have been shortlisted?

For each position, the selection committee will start assessing all applicants after the specific vacancy is closed. You may expect to hear from the host organization within 2 weeks after closing the position. Shortlisted candidates will be invited for an interview within 3 weeks after the closing of the vacancies. You will be informed about the result of the interview in maximum one week after the interview.

Once you have been selected for an ESR position, you will immediately start the recruitment process with the host institution, where you can negotiate on the starting date and, if applicable, initiate the visa application process.