

APRE Workshop - Esperienze MSCA-PF

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Key points

- Trovare host e supervisor
- Feedbacks from evaluators (Evaluation Summary Report)
- Difficoltà, tempistiche, suggerimenti

Esperienze: 2 Marie Curie projects

- 1 **European ICELEARNING** (Call: H2020-MSCA-IF-2018, MSCA-IF-EF-ST). Host: Ca' Foscari University of Venice, Secondment: University of Bergen.
Topic: Artificial Intelligence applied to ice core science (settore ENV).
- 2 **Global SKYNET** (Call: HORIZON-MSCA-2021-PF-01, HORIZON-TMA-MSCA-PF-GF). Host: Ca' Foscari University of Venice, Outgoing phase: University of California Irvine, Secondment: Jet Propulsion Laboratory.
Topic: Artificial Intelligence applied to satellite imaging for glacier research (settore ENV).

Trovare host / supervisor

- Contattare direttamente supervisor.
- Alcuni dipartimenti hanno una procedura di pre-screening dei progetti. Occhio alle tempistiche.
- Agire il prima possibile.
- Non ho riscontrato particolari criticità nell'individuare e contattare i supervisor.

Evaluation Summary Report

ICELEARNING (European)

Total score: 93.20% (Threshold: 70/100)

1 Excellence

Score: 4.70 (Threshold: 0/5 , Weight: 50%)

- The proposal is **novel**, and has an appropriate level of **inter/multidisciplinary** aspects.
- The **state of the art** is well presented with respect to ...
- The proposal provides clear and credible **objectives** with a good **overview** of the action.
- The **methodological approach** is credible and presented with very high **quality**.
- The **training plan** is outstanding, as well as the **two-way knowledge transfer**. **Details** provided are relevant and add up very well with the proposal objectives.

- The **supervisor** of the main host institution has an outstanding research track record and proven experience in supervising academic careers.
- The application shows a very good **match between the researcher's profile and track record with the project**.
- The new **complementary research skills** in the field of .. and .., which can be gained during the fellowship, improve the researcher's scientific profile and help to re-enforce professional **maturity**.

Weaknesses

- The description of the **advance** in machine learning algorithms and the specific **challenges or limitations are not fully provided**.

2. Impact

Score: 4.70 (Threshold: 0/5 , Weight: 30%)

- The project will strengthen the **collaboration** between both host institutions and their communities.
- The proposal highlights clearly and precisely how, when and where the project will enhance the **career prospects** of the researcher.
- The measures proposed for **dissemination** of research results among scientific community are credible and effective.
- The **exploitation** plan of the project results is appropriately described.
- The **communication** actions are clearly defined.

Weaknesses

- The dissemination strategy directed to audiences **other than the scientific community** is not well explained.

3. Implementation

Score: 4.50 (Threshold: 0/5 , Weight: 20%)

- The **work planning** for management, reporting activities, as well as dissemination and communication activities is realistically designed.
- Procedures for **monitoring** the quality and the progress of the fellowship are very appropriate and very effective.
- The major scientific **risks** that might endanger the project objectives are identified and **risk mitigation** activities are very well described.
- The **financial and administrative management** of the project is very good.
- The institutional environment of the **host** is outstanding.
- The proposal very well describes the excellent **infrastructure** that will be made available for the researcher.

Weaknesses

- The **allocated time** for the technical work package is not well justified.
- The WPs are not clearly represented in the **Gantt chart**.

Evaluation Summary Report

SKYNET (Global)

Total score: 96.60% (Threshold: 70/100)

1 Excellence

Score: 4.90 (Threshold: 0/5 , Weight: 50%)

- The proposed research is very **ambitious** ... The proposed approach goes significantly **beyond the current state-of-the art**. The level of **novelty** is well demonstrated in the proposal.
- The **state-of-the-art** is described well. The research **objectives** are very well defined, are of excellent **quality**, own a very high degree of **pertinence** and are backed-up by the state-of-the-art description very well.
- Despite being very ambitious, the research and innovation objectives are **realistic** and could be achieved in the frame of the proposed project because of the proposed modification of an early AI method developed for the same purpose.
- The **methodology** is laid out well, is based on well established concepts and models, and aligns well with the objectives. Different methods and data from **different disciplines** are well integrated.

- The project requires a high degree of **interdisciplinarity**.
- The **open science practices** are well integrated and described.
- The **supervisors** at both hosts are leaders in their research fields and offer excellent track records which are very relevant for the proposed research. The supervisors have very good to outstanding supervision records, including MSCA researchers.
- The planned **training activities** are well elaborated. The researcher will gain crucial additional knowledge in ... for the project by collaboration and specific courses at the outgoing host. The researcher would gain **transferable skills** via mentoring students at both hosts and attending relevant courses at the returning host.
- The **three-way knowledge** transfer via the researcher to the outgoing host and to the returning host is carefully planned and specified.
- The **researcher** has an excellent **track record** in relevant research, and the curriculum vitae documents a high level of relevant competences and skills.
- The **researcher** has a quite **inter-disciplinary** background and the record of publications/list of conference visits evidences the **willingness to communicate research** results. Together with demonstrable understanding in AI techniques relevant for the proposed research, the researcher is very well **suited** for this fellowship.

Weaknesses

- The **methodological challenges** concerning the AI model calibration and data validation are **not described in sufficient detail**.

2 Impact

Score: 4.80 (Threshold: 0/5 , Weight: 30%)

- The proposed measures to enhance the researcher's **career perspectives** and to enhance the researcher's **skill development** are very credible. The project will provide a step change in the skill set of the researcher by knowledge build-up in ... This substantial gain in scientific skills will increase the researcher's **maturity** and increase the number of research fields and institutions to apply for positions.
- The researcher has clear ideas of their **future career** - both in or outside academia. The fellowship will prepare the researcher ideally for this next career step by the knowledge gain in scientific and transferable skills.
- The proposal provides a robust plan to **disseminate** research results to academia and peers; these include targeting policy makers via regular press releases supported by the hosts.

- The strategy for the management and protection of **intellectual property** originating from the project is credible and laid out well in the proposal.
- The outlined **scientific, societal, and economic impacts** of the project are very realistic both in scale (from local to global) and in importance. The quantitative estimates of the project's contribution to the impacts are mostly provided in a credible manner.
- Provided the novel AI methods can be applied as planned, the methodology itself and the results obtained will be of very high **impact**. Even if the project fails to achieve global coverage in ..., the results will substantially complement current knowledge about ...
- Closely tied to the scientific value of the results will be a substantial **socio-economic impact** - particularly in remote glaciated areas ... and regarding the development of mitigation and adaptation measures to sea level rise. These impacts have a potential legacy beyond the project's duration.

Weaknesses

- The number of peer-reviewed **publications** planned is somewhat low.
- The proposed **engagement with the public** is not making use of the full set of channels possible. Reaching the full spectrum of people interested in this extremely important topic is therefore potentially limited.

3. Implementation

Score: 4.70 (Threshold: 0/5.00 , Weight: 20%)

- The proposed **work plan** is of high quality and displays a high **effectiveness** with appropriate **work packages** and clearly identified appropriate milestones and deliverables.
- The efforts assigned to the individual work packages in terms of **timing** and duration are appropriate to achieve the objectives.
- All participating organizations are at the forefront of terrestrial cryospheric research, with excellent capacities in terms of **infrastructure, logistics, and facilities**, all very well suited for the fellowship. **Offices and services** to support new researchers coming from abroad are in place at all institutions, facilitating the researcher's integration into these research communities.

Weaknesses

- While the proposal lists an adequate assessment of administrative risks, **risks associated with the very ambitious research** work planned are not laid out clearly enough. The global functionality of the novel image inpainting architecture needs to be tested thoroughly. The yet unknown outcome of this test paired with the relevance of this architecture for the project as a whole leads to the potential risk that not all the project goals will be achieved, which is not adequately discussed.

Difficoltà, tempistiche, suggerimenti

- L'idea è fondamentale.
- Tempistiche scrittura: 1-2 mesi
- Difficoltà: state-of-the-art.
- Suggerimento: supervisor coerente con il progetto.
- Suggerimento: accompagnare il revisore nella comprensione.
- Suggerimento: e' un'ottima occasione per esplorare altre linee di ricerca senza proseguire lungo quella del PhD.

GRAZIE PER L'ATTENZIONE :)
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