

Partnering Opportunity

Profile status : Published

Research Development Request

H2020-MSCA-IF-2020: Researcher specialised in computer science and robotics for the development of a research project on graph neural networks to create data-collecting and learning algorithms that operate inside the robot's architecture

Summary

A southern Spain university research group specialised in intelligent mobile robotics and computer vision is looking for scientist candidates from all over the world interested in the MSCA Individual Fellowship (call H2020-MSCA-IF-2020). The researchers will carry out research on graph neural networks to create data-collecting and learning algorithms that operate inside the robot's architecture.

Reference

RDES20200714001

Details

Description

A research facility that belongs to a University in the southwest of Spain has the ambition to create socially-aware robots that improve people's living conditions. The research group builds robots, from the mechatronics to the planning algorithms, that interact with real people in their adapted facility, the Autonomy Lab. This approach gives them a good perspective to study human-robot interaction processes and to design new cognitive architectures that support their research.

Social Robotics is one of the disciplines expected to provide a deeper impact on our everyday lives. Despite many impressive advances in the last years, one limiting factor is the increasing complexity of the distributed software systems that control advanced mobile manipulators. Robotics cognitive architectures, like CORTEX, provide powerful tools to build and maintain deep state representations of the robot and the environment. However, this

new level of internal organization still requires automated ways of self-improvement, replacing human algorithm tuning by deep learning procedures based on the robot's experiences. The research group is looking for a PhD degree (or equivalent) researcher that helps them to explore the new exciting field of graph neural networks to create data-collecting and learning algorithms that operate inside the robot's architecture, feed with its internal representations and free the roboticist from fine-tuning the complete system.

Deadline for EoIs: 01/08/2020

Deadline of the call: 09/09/2020

Anticipated duration of the project: 24 months

Stage of development

Proposal under development

Keywords

Technology

01001001	Automation, Robotics Control Systems
01003003	Artificial Intelligence (AI)

Market

02007012	Medical/health software
02007016	Artificial intelligence related software

Client

Client Country

Spain

Partner Sought

Type and Role of Partner Sought

- Type of partner sought:
Individual researcher of any nationality with a doctoral degree or at least 4 years' full-time research experience in the field of the project. Researcher should not have resided or carried out his/her main activity in Spain for more than 12 months in the last 3 years before 9th of September of 2020.
- Specific area of activity of the partner:
Computer science and robotics.
- Task to be performed:
Research project for a 2-year period on graph neural networks to create data-collecting and learning algorithms that operate inside the robot's architecture.
- EU / International project experience:
Desired but not compulsory.

Program - Call

Framework Program

Marie Skłodowska-Curie Actions

Call title and identifier

H2020-MSCA-IF-2020

Coordinator required

No

Duration

104 days

Deadline for EOI

01 Aug 2020

Deadline of the Call

09 Sep 2020

Weblink to the call

https://ec.europa.eu/research/mariecurieactions/actions/get-funding/individual-fellowships-2020_en