Research fellowship on Computer Vision for monitoring of public and shared environments- Università Ca’ Foscari Venezia (Italian law 30 December 2010, n.240, art. 22)

The present document in English is to be considered as a mere summary of the main provisions of the notice of competition which is available in Italian at the following [link] The text in Italian is the official text of the notice of competition for all legal intents and purposes and, in the event of non-conformity with the present document, it shall prevail.

Description
The Department of Environmental Sciences, Informatics and Statistics at Università Ca’ Foscari Venezia invites applications for a post-doc fellowship in:

**TITLE:** Computer Vision for monitoring of public and shared environments  
**SSD:** INF/01  
**Tutor:** Prof. Andrea Albarelli  
**Duration:** 12 months

**Abstract:** The goal of this project is the implementation of a general infrastructure to allow the use of an IP camera system for public environments (airport terminals, public buildings, museums, etc.) to enable different monitoring processes that exploit Machine Learning to extract quantitative and qualitative semantic information from the scene. To this end, the monitoring system may include the use of algorithms suitable for the individual task, allowing activities such as the counting of users queued for a particular service, the movement of individual users inside and outside the environment, the patterns of use and access to commercial activities or services, the state of occupancy of parking lots, the occurrence of dangerous conditions or anomalous behavior, verification of the correct management of baggage and personal effects, private and service activities in use in the monitored context. These activities must be carried out using uneven data sources coming from already existing camera networks, from possible future additions (with new fixed or mobile cameras) and from any ad hoc devices. The founding idea is in fact to design software, hardware and calibration / synchronization procedures suitable to treat the network of cameras in a homogeneous way, locating each one with high accuracy with respect to the overall geometry of the environment and exploiting its continuity in an integrated way by offering to the scene analysis algorithms, different and coordinated points of view on the same volume to be analyzed.

The research may be carried out in English.  
The fellowship is intended to provide the successful candidate with the opportunity to pursue his/her own research while benefiting from the range of expertise at Università Ca’ Foscari Venezia.

**Who can apply**
Propective candidates are expected to hold a master’s degree in **Computer**
Science or related disciplines.

Ca' Foscari encourages applications from researchers with positive evaluation in all the criteria in individual proposals such as Marie Skłodowska Curie Actions - Individual Fellowships/ERC Starting Grants/FIRB (Italian Fund for basic research investments)/SIR (Scientific Young Independence Research) or similar. Researchers having successfully completed Marie Skłodowska Curie Actions - Individual Fellowships/ERC Starting Grants/FIRB (Italian Fund for basic research investments)/SIR (Scientific Young Independence Research) or similar funded projects are warmly encouraged to apply.

Duration of contract: 12 months, approximately starting: September / October 2019

Stipend: The research fellowship amounts to **23.367,00 Euros** per year, including taxes and social charges.

Deadline for submission of applications: July the 27nd, 12.00 noon.

How to apply:

Candidates should submit:
1. The application form;
2. A motivation letter (max 1 page) along with their CV in European format, duly dated and signed, both to enclosed as a one single.pdf file. (link)
3. A copy of a valid identity document (either Identity Card or Passport);
4. (If available) Evaluation Summary Reports of Marie Skłodowska Curie Actions - Individual Fellowships/ ERC Starting Grants/FIRB (Italian Fund for basic research investments)/SIR (Scientific Young Independence Research) individual proposals having passed all the evaluation thresholds;
5. (If available) Details of Marie Skłodowska Curie Actions - Individual Fellowships, ERC Starting Grants, FIRB (Italian Fund for basic research investments)/ SIR Scientific Young Independence Research funded projects;
6. All documents, qualifications and publications relevant for the selection procedure (please, see the notice link).

All the schemes of the quoted documentation are available on the website (link).

How to submit your application

Applications should be submitted by the online procedure, available on the notice webpage (link)

Or submit here: https://static.unive.it/domandeconcorso-en/accesso/dais1219albarelli
The candidate, after the uploading, will receive a submission number and an e-mail acknowledging receipt of his/her application. The candidate if necessary could access the procedures for updating any data and materials by the link provided by the e-mail, in any case any updates must be made no later than the deadline **July the 27nd, 12.00 noon**. Please note that the University can be contacted for any support needs by the candidate until 24 hours prior to the deadline. Please note that in case of an high number of applications and/or weight of the materials loaded by the candidates the system might become slower, Therefore it is suggested not to start the process close to the deadline.

**NB:** the University does not take on responsibility for wrong or late communication of addresses, nor for any communication problem not depending on the University.

**Evaluation**
Up to 100 points, specifically:
For qualifications, publications and possible tests, from 0 to 60;
For interview, from 0 to 40.

**Selection procedure**
The interview will be **on July the 29rd h 12:00** at the at the Department of Environmental Sciences, Informatics and Statistics, Ca’ Foscari University of Venice, - Scientific Center – Zeta B Building - Via Torino, 155 – Prof. Andrea Albarelli office - Mestre (Venice).
The short-list of the candidates admitted to the interview will be available before the interview outside of the office of Prof. Andrea Albarelli. Any postponement, will be published on the University’s webpage ([link](#)).

**The interview:**
The interview questions will cover:
- Experience in research on topics related to the 3D data processing
- Experience in research on topics related to Machine Learning
- Experience in technology transfer projects
- Good knowledge of English
- Good knowledge of Italian (in case of foreign candidates)

Candidates living farther than 200 Kms from Venice may ask to hold a telematic interview.

**Information and contacts**
Candidates may find further details about the application process and the research
project in the official call published on the following (link)
For further information please contact Prof. Andrea Albarelli, - email:
albarelli@unive.it - 041 234 8470

Rep. 818/2019
Prot. 40536/III-13

Venice, 10/07/2019

Il Direttore del Dipartimento di
Scienze Ambientali, Informatica e Statistica
Prof. Antonio Marcomini