12 Month PostDoc Position EU 7th Framework Programme - The PEOPLE Programme

Four Dimensional Cultural Heritage World

Description

In the EU 7th Framework Programme PEOPLE, Grant Agreement No. 324523 "Four Dimensional Cultural Heritage World" the Institute for Photogrammetry of the University of Stuttgart, Germany, is offering a one year PostDoc position for PhD holders (m/f). Applicants should be interested in the area of the latest advances in computer vision and learning as well as 3D modeling and virtual reality for the rapid and cost-effective 4D maps reconstruction in the wild for personal use, and support the aim of our European Commons and the digital libraries EUROPEANA and UNESCO Memory of the World (MoW) to build a sense of a shared European cultural history and identity.

The project 4D-CH-World consists of 6 academic, research, industrial and CH stakeholders from 6 EU countries. Its main goal is to enable historians, architects, archeologists, urban planners, or any other affiliated scientists to reconstruct from available data on repositories, study, understand, preserve or document urban environments, as well as, organizing collections of thousands of images (spatially and temporally) in generating novel views of historical scenes by interacting with the time-varying model itself. The evolving steps depiction helps understanding the cultural trends, performing behavioral analysis, exploiting the impact of the available raw resources in building development, further analyzing the urban economy factors, and simulating a future urban growth in order to understand the future demands, and satisfy in time the people's concrete needs. An education system will offer the opportunity to exploit these innovative processing steps to motivate students and help them better understand many things in an amusing way. Finally, pupils, university students, tourists, communes, future mechanics and economists, will observe urban environment changes through time, not just read it, and therefore understand it, so as, future plans of action regarding urban renewal or sustainable development would be less likely to fail.

The successful candidate will be an active member of a prestigious research team delivering advanced technologies for 2D/3D4D data acquisition, 2D/3D/4D data modeling and management/archiving using cloud services, virtual and augmented reality, 3D/4D reconstruction and dissemination of deliverables.

The Applicant should:

1. Have completed a PhD from a recognized university in Geodesy & Geoinformatics, Geomatics, Computer-/Electrical Engineering, Computer Science and/or Surveying Engineering/ Photogrammetry in the above fields, with excellent programming knowledge (C++, C, Java) and very good language and communication skills
2. At the time of recruitment, not have resided (or carried out his/her main activity e.g. work, studies, etc.) in Germany, for more than 12 months in the last 3 years immediately prior to the reference recruitment date.
3. Have excellent knowledge of the English language at a proficiency level (spoken and written)
4. Be able to present R&D results on project meetings, international conferences, to the public (outreach) and in scientific publications and to contribute to patent applications.

Career Stage

Experienced Researcher (PostDoc) – According to the FP7-PEOPLE (Marie Curie Actions) Regulations. Eligibility rules for the Marie Curie fellows can be found at the FP7-PEOPLE 2013 Work programme: http://ec.europa.eu/research/mariecurieactions/documents/about-mca/actions/itn/marie-curie-actions-fellowships-people-wp-201301_en.pdf

Research Profile

Experienced Researcher (PostDoc) – According to the required skills the applicant should be capable to manage 3D data acquisition by photogrammetry & laser scanning using Structure-from-Motion, Dense Image Matching and adequate point cloud processing tools, to do 3D modeling using Autodesk 3ds max, Trimble SketchUp, SketchUp Pro, and to use Serious Game Engines (e.g. Unity) and Augmented Reality environments for 3D Data Visualization and Semantic Data Enrichment.

Benefits

- The applicant will have the chance to visit several CH technology related scientific training summer schools and workshops and Complementary Skills seminars.
- His/her main activities are carried out at the Institute for Photogrammetry, at the University of Stuttgart
- The position will be paid according to FP7-PEOPLE Programme rules for Experienced Researchers, including the usual social benefits of Germany.
- The length of the employment contract will be 12 months from the start of employment.
- Training in a range of state-of-the-art scientific skills, intellectual property and project management skills and visiting German language courses.

For more details on the fellow salary and other benefits/eligibility criteria, please refer to the FP7-PEOPLE Marie Curie actions website at: http://ec.europa.eu/research/mariecurieactions/careers_en.htm and the FP7-PEOPLE ITN2013 work programme: http://ec.europa.eu/research/mariecurieactions/documents/about-mca/actions/itn/marie-curie-actions-fellowships-people-wp-201301_en.pdf

Applicants are requested to submit the following:

1. Detailed Curriculum Vitae.
2. Motivation Letter
3. Official certified transcripts of grades from all academic institutions of higher education listed in his/her application, certified copies of degrees, or/and certifications of fulfillment of the required obligations
4. Official certified copies of titles in English language
5. Names of three referees who, upon request, can provide recommendation letters
6. Copies of any related research papers or other significant work by the applicant

Applications must be submitted in a closed express courier envelope marked as "*Application for FP7-PEOPLE 4D-CH-World*" – *Prof. Dieter Fritsch, Institute for Photogrammetry, University of Stuttgart, Geschwister-Scholl-Str. 24D, D-70174 Stuttgart, Germany.*

Applicants are also requested to send their applications electronically to these email addresses dieter.fritsch@ifp.uni-stuttgart.de, eu@verwaltung.uni-stuttgart.de and adoulam@cs.ntua.gr before the deadline of 20th of August 2014, 24:00, however, please note that the electronic submission alone will not be considered as a formal application unless the printed application is received as requested in the previous paragraph.

For enquiries: dieter.fritsch@ifp.uni-stuttgart.de
Tel. +49-711-685-83201, -83386

Start of the position: October 1st 2014

Please visit our website for further information– www.ifp.uni-stuttgart.de/news/jobs or alternatively contact the Personnel Department, University of Stuttgart, Keplerstr. 7 D-70174 Stuttgart

The University of Stuttgart is committed to equality of opportunity and to selection on merit. It therefore welcomes applications from all sections of society and particular welcomes applications from people with disability.

Research Fields

Photogrammetric and Geospatial Engineering, Geomatics - Computer science