

Position 2 - Multi-media Content Including Image Analysis and Visual Identification of People in Crowded Spaces

Status: Open

Host Institution: “Mihai Viteazul” National Intelligence Academy

Objectives: Since a large part of the society’s digital life consists of the production and usage of multi-media content, societal security and crime prevention needs also media-content analysis. This research aims at exploring better technical ways for law enforcement and intelligence stakeholders to use image analysis and identification in crowded spaces for security and safety purposes. The research provides a deeper understanding of artefacts found in multimedia content and advanced computational methods to reveal traces of abnormal activities in complex, unstructured multimedia content.

Expected outcomes: Computational methods, policies and legal regulations for (i) processing of video, images, audio, and other multimedia content, (ii) forensically sound methods for signals, image, and video analysis, knowledge extraction, automatic categorisation, and indexing of multimedia content, (iii) content analysis of multimedia data in the absents of structure and metadata, (iv) detection and reconstruction of abnormal activities from multimedia content. The candidate will be expected to publish two peer-reviewed journal articles, participate and present in one workshop, write two research reports and a Ph.D. Thesis.

Main supervisor: Prof. dr. Irena Chiru

Co-supervisor: Prof. dr. Craig Valli

Planned secondments:

Host 1: Edith Cowan University – Security Research Institute (Australia)

Host 2: Advanced Technology Institute (Romania)

Host 3: Netherlands Forensic Institute – Digital Technology and Biometry (Netherlands)

Eligibility criteria

Eligibility for admission will be determined by considering the combination of the candidate’s academic qualifications and relevant professional experience according to the table below.

	First degree/Bachelor degree	Second degree/Master degree	Required knowledge	Required expertise
Candidate	Computer Sciences/ Engineering & Technology	Computer Sciences/ Engineering & Technology	Analytics Law	Social
	Mathematics/	Mathematics/		

	Statistics	Statistics		Science
	Sociology/ Intelligence and Security Studies	Sociology/ Intelligence and Security Studies		
	Cognitive Science	Cognitive Science		

In the case where a number of candidates meet and/or surpass the above indicated criteria further qualitative criteria may be applied for selection, including ranking first and second degrees (e.g. distinction, class of degree and/or placing in top percentile within cohort)

Candidates who have completed their Bachelor and/or Master degree in an institution where English is not the language of instruction need to present one of the following Secure English Language Test (SELT) results as follows:

- TOEFL Internet-Based (iBT) – minimum 95 with a writing score of at least 24
- Academic IELTS – minimum 6.5 with a minimum of 6.0 in each element
- Advanced Cambridge Certificate at grade C or better.
- The test results must not be older than 24 months on the date of the application deadline.

Selection criteria

- It would be an advantage if the candidate has had work experience in the field of computer sciences/engineering, sociology, mathematics/statistics, intelligence and security studies or research in the fields
- It would be an advantage if the candidate has publications in academic journals and/or ranked conferences
- The candidate should possess critical reasoning, abstract thinking, creative thinking, conceptual literacy, computer literacy, foreign language proficiency, master of basic research methodology, proficiency in information selection and synthesis, ability to innovate, structured analytical thinking
- The candidate should also be disciplined and possess trained intellectual ability to withstand effort.

Personal attributes

- Sharp, logical thinking
- Excellent oral and written communication skills and an ability to communicate effectively across different stakeholder groups
- Active listening, teaming, collaborative
- Ability to work both individually and in a (virtual) team environment

- Ability to meet deadlines and produce work of a consistently high standard
- Perceptive, intuitive

Please note there are strict eligibility requirements which apply to all Marie Curie Researchers.

- The candidate must not have resided or carried out his/her main activity (work, studies, etc.) in Romania for more than 12 months in the 3 years immediately prior to his/her recruitment under the project (short stays such as holidays are not counted).
- The candidate must be within 4 years of the diploma granting you access to doctorate studies at the time of recruitment and has not yet been awarded the doctorate degree.
- The candidate may be of any nationality.
- The candidate must work exclusively for the project during the employment contract.
- The candidate must fulfil the conditions to be admitted in the PhD programme indicated in the Job Vacancy.

For further information on Marie Curie schemes and eligibility please visit http://ec.europa.eu/research/mariecurieactions/funded-projects/how-to-manage/iapp/index_en.htm.

For an informal discussion regarding this position, please contact in writing Professor dr. Irena Chiru at ichiru@dcti.ro.

Organisation: “Mihai Viteazul” National Intelligence Academy

School/Department: Doctoral School

Position: PhD student

Contract type: Study Agreement

Status: Full-time

Starting date: 1st of May 2017

Hours of work: 40 hours per week (Monday to Friday)

Duration: 36 months

Salary: In accordance with Marie Skłodowska-Curie actions (MSCA), the salary will consist of EUR 25,489.56 per year. Note that this rate does not include the health insurance contribution, which the successful candidate is expected to pay monthly in Romania, according to the EU provisions in health insurance system for EU and non-EU citizens. Mobility Allowance is EUR 7,200 per year per researcher. Family Allowance (where applicable at the time of recruitment) is EUR 6,000 per year per researcher (all amounts stated are before taxation).

Apply by: 4th January 2017

How to apply:

Apply by submitting a CV, list of publications, application letter and copies of certificates.

Where to apply

Please send all the required documents to the following e-mail address: animv@sri.ro.

Shortlisted applicants will be notified by 9th January 2017. Interviews are planned for the week starting 16th January 2017.