Call for expression of interest for one (1) position of Research and Development Engineer in the
Institute of Computer Science (ICS)
Foundation for Research and Technology – Hellas (FORTH)

Position: One (1) Research and Development Engineer, for the project RECLAIM (EU GA: 101070524)

Project: “RECLAIM: AI-powered Robotic Material Recovery in a Box”, funded under HORIZON-CL4-2021-
DIGITAL-EMERGING-01-09 (EU GA: 101070524)

Desired starting date: March 1st, 2023
Duration: 6 months with possibility of extension
Location: Heraklion, Crete, Greece
Opening date: 16/1/2023
Closing date: 26/1/2023
Ref. : RECLAIM-Vision-Jan2023
Description

We seek one “Research and Development Engineer” in the area of Image Processing, Computer Vision and Robotics, with background in RTD projects.

The candidate will participate in the R&D activities of FORTH-ICS in the context of the project “RECLAIM: AI-powered Robotic Material Recovery in a Box”, funded by the European Commission under HORIZON-CL4-2021-DIGITAL-EMERGING-01-09, and will work on computer vision for waste identification and categorization.

The project “AI-powered Robotic Material Recovery in a Box” (RECLAIM) will develop a portable unit for the automated recovery of recyclable materials. RECLAIM adopts a modular multi-robot/multi-gripper approach for material recovery, based on low cost Robotic Recycling Workers (RoReWos). An AI module combines imaging in the visual and infrared domain to identify, localize and categorize recyclables. The output of this module is used by a multi-RoReWo team that implements efficient and accurate material sorting. Further, a citizen science approach will increase social sensitivity to the Green Deal. This is accomplished via a novel Recycling Data-Game that enables and encourages citizens to participate in project RTD activities by providing annotations to be used in deep learning for the retraining of the AI module.

The candidate will contribute in tasks related to image processing and computer vision for the identification and categorization of recyclables, and the physical transfer of waste into bins.

Required qualifications:

- Bachelor degree in Computer Science, Mechanical Engineering, Electrical Engineering or related fields
- Very good knowledge of image processing and computer vision methods
- Very good knowledge of robotics
- Very good knowledge of artificial intelligence and machine learning methods
- Programming skills in C, C++, Python, Matlab.
- Very good knowledge of the English language

 Desired qualifications:

- Master degree in Computer Science, Mechanical Engineering, Electrical Engineering or related fields
- Experience in the automated treatment of recyclable materials and particularly plastics.
- Experience in synergetic European and national projects.
- Publications in the fields of computer vision and/or robotics
- Experience with industrial systems and applications

Application Submission

Interested candidates can submit their applications via http://www.ics.forth.gr/jobs/en/ using the link “Apply for the position” under the announcement. Applications must include:

- Detailed CV, including qualifications and interests in the above areas, and proof thereof;
- Scanned copies of academic titles;
- Detailed presentation of prior work, studies and/or publications, references etc. demonstrating knowledge of desired skills (e.g. experience on specific programming languages and hardware platforms).
The candidates may be invited for interview (onsite or remotely) if deemed necessary.

**Contact Information:**

For information and questions about the advertised position, the activity of the group or the Institute, please contact Dr Michail Maniadakis (mmaniada@ics.forth.gr).

**Selection Announcement**

The result of the selection will be announced on the website of ICS-FORTH. Candidates have the right to appeal the selection decision, by addressing their written objection to the ICS secretariat within five (5) days since the results announcement on the web. They also have the right to access (a) the files of the candidates as well as (b) the table of candidates’ scores (ranking of candidates results). All the above information related to the selection procedure will be available at the secretariat of ICS FORTH in line with the Hellenic Data Protection Authority. Access to personal data of co-candidates shall be limited to personal data (and relevant data) and supporting documents which have been the basis of the evaluation of the candidates for the specific post(s). Prior to the announcement of the personal data and/or documents of the co-candidates to the applicant, FORTH will inform the data subjects in an appropriate way.

**Disclaimer**

FORTH is compliant with all legal procedures for the processing of personal data as defined by the Regulation EU/2016/679 on the protection of natural persons with regard to the processing of personal data.

FORTH processes the personal data and relevant supporting documents that you have submitted to us. Processing of that data is carried out exclusively for the needs and purposes of this specific call. Such data shall not be transmitted to or communicated to any third party unless required by law. FORTH retains the above data up to the announcement of the final results of the call, unless further process and reservation is required by law or for purposes of exercise, enforcement, prosecution of certain one’s legitimate legal rights’ as defined in the Regulation EU/2016/679 and/or in national law. We informs you that under the Regulation EU/2016/679 you have the rights to be informed about your personal data, access to, rectification and erasure, restrictions of process and objection to as provided by applicable regulation and national laws.

We acknowledge also to you, that you have the right to file a complaint to the national Data Protection Authority. For any further information regarding exercise of your personal data protection rights, you may contact the Data Protection Officer at FORTH at dpo@admin.forth.gr.

You have the right to withdraw your application and consent for the processing of your personal data at any time. We inform you that, in this case, FORTH shall destroy such documents and/or supporting documents submitted and shall delete the related personal data.