IAESTE BELGIUM

WORK OFFER

Ref. No. BE-2020-070KUL

Employer Information

Employer: Flanders Make
HR

Gaston Geenslaan 8 - 3001 Leuven - BELGIUM
Oude Diestersebaan 133 – 3920 Lommel - BELGIUM
3001 Leuven
Belgium

Website: www.flandersmake.be

Location of placement: Leuven, Belgium
Nearest airport: Brussels
Working hours per week: 38.0
Working hours per day: 7.6

Number of employees: 100
Business or products: research for the manufacturing industry

Student Required

General Discipline: 11-COMPUTER AND INFORMATION SCIENCES
14C-ELECTRICAL AND ELECTRONICS ENGINEERING

Field of Study:
or related field

Completed years of study: 3

Student status requirements: Student status during the entire internship is mandatory: please include Certificate of Enrolment with nomination.

Language required: English Excellent

Required Knowledge and Experiences:

• Bachelor degree;
• Knowledge of image processing, computer vision, machine learning is highly recommended;
• Good programming skills in Python or C++
• Experience in open-source deep learning frameworks such as TensorFlow or PyTorch preferred

Other requirements:

• Passionate by research and new technologies with focus on applications that includes machine learning, deep learning and computer vision
• Result oriented, responsible and proactive;
• Eager to learn and a team player.

Only students with EEA or Swiss nationality!

Work Offered

Operator Actions Recognition using Deep Learning

The detection and recognition of operator actions from a data streams is nowadays a popular challenge, with the potential to aid in operator fast training, monitoring and fault detection. In this internship the aim is to study the state of the art available techniques that address this challenge of interpreting operator actions in industrial environment.
The expected outcome is a real-time operator action detection and action recognition system.

This internship is linked to the FAMAR project, in which the overall goal is to create an economically feasible user-centred Augmented Reality application methodology for flexible assembly and inspection operations in a low volume/high mix manufacturing environment.

In this context, the goal of this internship is to perform a state of the art study of the latest research and development done in the area of operator actions recognition, oriented toward industrial applications in a controlled environment. A list of predefined actions such as: caulking, hammering and/or screwing will be selected.
Multiple vision sensors will be made available during the internship (2D and 3D) in order to validate. During this internship, after the state of art study you will have to collect and annotate data of pre-selected actions to be recognized. Then, implement, apply and benchmark the selected approaches to perform operator action recognition on the collected dataset.

Number of weeks offered: 16 - 26
Within the months: 06-APR-2020 - 18-DEC-2020
Or within: -
Company closed within: -
Latest possible start date:

Working environment: Research and development
Gross pay: 200 EUR / Week
Deduction to be expected: 0
Payment method / time of first payment: /

Accomodation

Canteen at work: No
Expected type of accommodation: Student dormitory
Accommodation will be arranged by: IAESTE

Estimated cost of lodging: 100 EUR / Week
Estimated cost of living incl. lodging: 200 EUR / Week

Additional Information

Nomination Information

Deadline for nomination: 15-MAR-2020

Date: 27-FEB-2020 *On behalf of receiving country:* Annelies Vermeir