IAESTE BELGIUM

WORK OFFER

Ref. No. BE-2019-015UGE

Employer Information

Employer: Ghent University - IDLab research group

IDLab (Ghent University - imec)
Technologiepark-Zwijnaarde 15
9052 Zwijnaarde
Belgium

Website:

Location of placement: Zwijnaarde
Nearest airport: Brussels Airport
Working hours per week: 40.0
Working hours per day: 8.0

Number of employees: 250
Business or products: Research

Student Required

General Discipline: 11-COMPUTER AND INFORMATION SCIENCES

Field of Study: 11.0102-Artificial Intelligence.
11.0103-Information Technology.
11.0901-Computer Systems Networking and Telecommunications.

Completed years of study: 4

Language required: English Excellent

Required Knowledge and Experiences:

Programming languages: python, java.
Networking protocols: HTTP, TCP/IP.

Other requirements:

Student status obligatory: please include a Certificate of Enrolment with your nomination.

Work Offered

"Adaptive video streaming for Holographic applications"

The aim of Holographic-type communication (HTC) is to transport digitized objects to remote locations, as realistically as possible. These objects are typically represented by three-dimensional point clouds, which can be viewed from different angles. To allow for high-quality applications for remote communication or entertainment, huge bandwidth and latency requirements have to be met.

Several concepts have to be combined to make HTC a reality, including enhanced transport protocols for adaptive video streaming and algorithmic techniques to predict from which angle a user is watching, so that only a partial view on the hologram has to be transmitted.

This internship will therefore study one or more of the following aspects: (1) HTTP Adaptive Streaming (HAS) protocol enhancements to provide low-latency HTC, (2) machine learning techniques for viewpoint prediction to reduce bandwidth and (3) practical implementations for validation and demonstration. In each of these areas, our research group has a strong research track record and early prototypes have been developed. The trainee will collaborate in a small team.

Number of weeks offered:	6 - 12	*Working environment:*	Research and development
Within the months:	03-JUN-2019 - 27-SEP-2019	*Gross pay:*	240 EUR / ~~Month~~ week
Or within:	-	*Deduction to be expected:*	0
Holidays:	-	*Payment method / frequency:*	/

Accomodation

Canteen at work:	No		
Expected type of accommodation:	Student dormitory	*Estimated cost of lodging:*	400 EUR / Month
Accommodation will be arranged by:	IAESTE	*Estimated cost of living incl. lodging:*	800 EUR / Month

Additional Information

Nomination Information

Deadline for nomination: 31-MAR-2019

Please send nominations by Exchange Platform

Date: 15-JAN-2019

On behalf of receiving country: Annelies Vermeir