IAESTE BELGIUM

WORK OFFER

Ref. No. BE-2019-031UGE

Employer Information

Employer:

Website:

Location of placement: Gentbrugge, Belgium
Nearest airport: Brussels international airport
Working hours per week: 40.0
Working hours per day: 8.0

Number of employees: 9
Business or products: Software for hardware designer in the semiconductor industry

Student Required

General Discipline:	11-COMPUTER AND INFORMATION SCIENCES 14C-ELECTRICAL AND ELECTRONICS ENGINEERING	*Completed years of study:*	3
Field of Study:	11.0101-Computer and Information Sciences, General. 14.1001-Electrical and Electronics Engineering	*Language required:*	English Excellent Or Dutch Good

Required Knowledge and Experiences:

Java programming language, Typescript, TCL

Other requirements:

Student status obligatory: please include a Certificate of Enrolment with your nomination.
If trainee has non-EEA/Swiss nationality: maximum duration is 90 days.

Work Offered

Sigasi Studio is an IDE for digital design in Verilog or VHDL. It provides the digital designer with all the facilities that are typically reserved for software developers such as syntax checking, navigation, project management, refactoring, autocompletion ...

Visual Studio Code is a new and promising development environment, developed by Microsoft and running on Windows, Linux and Mac OS X. It is a platform that can be extended for new computer languages and simulators using a standard interface. This technology allows developers of IDEs to focus on the back-end (compilers and simulators) and reuse existing front-ends (editors). Conversely, it allows developers of editors to reuse existing back-ends with support for various programming languages.

Visual Studio Code defines APIs for syntax highlighting, code completion, syntax error reporting and debugging. The latter is especially interesting in the world of digital circuit design.

When simulating (and debugging) digital circuits, engineers use a proprietary simulator. Each simulator has its own user interface, which makes it hard to switch between simulators. It would be great if engineers could learn one user interface, and have all simulator specific details hidden under the hood.

The objective of this internship is to implement the remote debugger protocol specified by Visual Studio Code for a VHDL or (System)Verilog simulator. This requires writing a debug adapter for the simulator. On the Visual Studio Code side, the adapter is written in Javascript. The code to control the simulator will most likely be written in TCL.

See also: https://code.visualstudio.com/Docs/extensionAPI/api-debugging

Number of weeks offered:	12 - 26	*Working environment:*	Research and development
Within the months:	15-JAN-2019 - 15-DEC-2019	*Gross pay:*	240 EUR / Week
Or within:	-	*Deduction to be expected:*	0
Holidays:	-	*Payment method / frequency:*	Bank transfer / Weekly

Accomodation

Canteen at work:	No		
Expected type of accommodation:	Student dormitory	*Estimated cost of lodging:*	100 EUR / Week
Accommodation will be arranged by:	IAESTE	*Estimated cost of living incl. lodging:*	200 EUR / Week

Additional Information

Nomination Information

Deadline for nomination:	31-MAR-2019	*Please send nominations by*	Exchange Platform

Date: 26-JAN-2019 *On behalf of receiving country:* Annelies Vermeir