

## PhD in INGEGNERIA DELL'INFORMAZIONE / INFORMATION TECHNOLOGY - 37th cycle

## **Research Area n. 1 - Computer Science and Engineering**

## THEMATIC Research Field: VIDEO-ANNOTATION SYSTEMS FOR EDUCATION

Monthly net income of PhDscholarship (max 36 months)	
€ 1400.0	
In case of a change of the welfare rates during the three-year period, the amount could be modified.	

Context of the research activity		
Motivation and objectives of the research in this field	The field of education is moving towards increasing teacher/students' interaction and students' agency, also by means of technologies; moreover, the pandemic (which is still affecting education systems) has furthermore highlighted the need for making hybrid learning experiences more effective. This research activity is about video-annotation systems, i.e. systems that allow students to provide feedback on the educational videos they are required to watch, in terms of understanding, comments, questions etc. More specifically, the research will investigate the feasibility of systems that allow to seamlessly integrate annotation systems of synchronous educational events (e.g. a lesson, a conference) and asynchronous events (e.g. a flipped classroom scenario, in which students watch videos at their own pace and time), plus all the correlated instructor's dashboards with learning data.	
Methods and techniques that will be developed and used to carry out the research	The research work will be developed at Politecnico's premises. The school of Industrial and Information Engineering will serve as test-bed for the prototypes being developed.	
Educational objectives	The PhD candidate will learn how to elicit goals and requirements for the development of a tool and to run an evaluation of its usability and effectiveness, in the field of	



	education; s/he will also improve her technical skills in programming.
Job opportunities	The sector of educational technologies, also due to the Covid-19 pandemic, is booming: tech-companies and start -ups are interested in the development of such tools. It is planned to contact some companies active in this field in the course of the PhD (starting from the second year), to present the idea and set up a cooperation.
Composition of the research group	0 Full Professors 1 Associated Professors 0 Assistant Professors 0 PhD Students
Name of the research directors	Nicoletta Di Blas

	Contacts
nicoletta.diblas@polimi.it, 0223993520	

Additional support - Financial aid per PhD student per year (gross amount)		
Housing - Foreign Students		
Housing - Out-of-town residents (more than 80Km out of Milano)		

Scholarship Increase for a period abroad		
Amount monthly	564.01 €	
By number of months	6	

Additional information: educational activity, teaching assistantship, computer availability, desk availability, any other information

The research will build upon an already existing tool (www.evoli.polimi.it) that was successfully launched in March 2020 (version 1) and that has been used by thousands of users from all over the world.

EDUCATIONAL ACTIVITIES (purchase of study books and material, including computers, funding for participation in courses, summer schools, workshops and conferences): financial aid per PhD student per year 2nd year: euros per student (1534) 3rd year: euros per student (1534)

TEACHING ASSISTANSHIP: (availability of funding in recognition of supporting teaching activities by the PhD student)

## POLITECNICO DI MILANO



There are various forms of financial aid for activities of support to the teaching practice. The PhD student is encouraged to take part in these activities, within the limits allowed by the regulations.

COMPUTER AVAILABILITY: 1st year: individual use 2nd year: individual use 3rd year: individual use

DESK AVAILABILITY: 1st year: individual use 2nd year: individual use 3rd year: individual use