

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

Research Area n. 1 - Computer Science and Engineering

## THEMATIC Research Field: THREAT INTELLIGENCE INNOVATION (TOOLS AND PROCESS)

Monthly net income of PhDscholarship (max 36 months)		
€ 1250.0		
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 candidate will develop novel methodologies in the field of Cyber Threat Intelligence. Some examples of the objectives that will be addressed are: - Automatic enrichment of Malware Campaigns/IoC based on NLP techniques applied to external analysis reports - Evaluation/ranking of Threat Intel Information Sources - Cyber Threat Intelligence information Aging and IoC Lifecycle management - Visual Analysis for Threat Intelligecne data	
Methods and techniques that will be developed and used to carry out the research	A wide array of methods and techniques will be applied to threat intelligence sources (access to sources will be provided by Telecom Italia's labs).  Amongst them, machine learning, natural language processing, as well as visual analytics techniques.	
Educational objectives	After the PhD programme, the student will have developed novel technologies in the area of cyber threat intelligence, for automating and augmenting the activities with the application of several techniques, including machine learning	
Job opportunities	Cybersecurity is an attractive research and professional area. Graduates with expertise in this area can easily find jobs both in academia and in private organizations. There	

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Composition of the research group	4 Full Professors 15 Associated Professors 7 Assistant Professors 32 PhD Students
Name of the research directors	Prof. Donatella Sciuto, Prof. Stefano Zanero

Contacts
Prof. Stefano Zanero
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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	566.36 €	
By number of months	6	

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

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

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 (INDIVIDAUL USE):

1st year: Yes 2nd year: Yes 3rd year: Yes

### DESK AVAILABILITY (INDIVIDUAL USE):

1st year: Yes 2nd year: Yes 3rd year: Yes

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List of Universities, Companies, Agencies and/or National or Institutions that are cooperating in the research:

This research is in cooperation with (and funded by) Telecom Italia. Part of the research may (if helpful) be conducted also on the premises of Telecom Italia's Cybersecurity Lab in Turin, Italy