



# PhD in INGEGNERIA DELL'INFORMAZIONE / INFORMATION TECHNOLOGY - 38th cycle

Research Area n. 4 - Telecommunications

THEMATIC Research Field: **COMPILER-DRIVEN NETWORK STACKS**

**Monthly net income of PhDscholarship (max 36 months)**

**€ 1350.0**

In case of a change of the welfare rates during the three-year period, the amount could be modified.

## Context of the research activity

<b>Motivation and objectives of the research in this field</b>	The program investigates the development of new techniques that can improve the performance and energy efficiency of packet-processing programs running either at end-hosts, middleboxes or in-network.
<b>Methods and techniques that will be developed and used to carry out the research</b>	The research will be both theoretical and applied. Linux kernel programming as well as the use of state-of-the-art programmable Network Interface Cards (NICs) will be used to test the research hypotheses.
<b>Educational objectives</b>	Acquiring a comprehensive knowledge of the literature and the ability of elaborating it in a critical manner. Developing advanced network systems, programming and operating system skills for testing theoretical hypotheses. Moreover, becoming able to write scientific papers on the topic to be published in top international conferences and journals.
<b>Job opportunities</b>	R&D divisions of main telecommunications manufacturers service operators
<b>Composition of the research group</b>	2 Full Professors 2 Associated Professors 1 Assistant Professors 6 PhD Students
<b>Name of the research directors</b>	Antonio Capone



Contacts
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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	675.0 €
By number of months	6

Additional information: educational activity, teaching assistantship, computer availability, desk availability, any other information
<p>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 5.503,32 Euro per student</p> <p>TEACHING ASSISTANTSHIP: (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.</p> <p>COMPUTER AVAILABILITY: individual use</p> <p>DESK AVAILABILITY: individual use</p>