



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

Research Area n. 3 - Systems and Control

PARTENARIATO PNRR Research Field: CONTROL OF AUTONOMOUS AND SEMI-AUTONOMOUS HIGH-PERFORMANCE CARS

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 research will focus on the development of systems&control technologies (actuators, sensor, algorithms, SW implementation), in the specific fields of high-performance electric and hybrid vehicles. This is an emerging and rapidly developing field. The objective is to develop new methods and technology solutions.
Methods and techniques that will be developed and used to carry out the research	The methods and techniques which will be used are: <ul style="list-style-type: none"> - Signal-processing and data-analysis - System-identification and virtual sensing - Advanced control algorithms
Educational objectives	Develop new results and know-how in the field of design of advanced control systems for autonomous and semi-autonomous vehicles, with focus on high-performance cars
Job opportunities	R&D engineer in vehicle-manufacturers companies (OEM) R&D engineer in Tier-1 suppliers companies in the vehicular industry Project manager in advanced mechatronics industry
Composition of the research group	2 Full Professors



	2 Associated Professors 3 Assistant Professors 20 PhD Students
Name of the research directors	Sergio Savaresi

Contacts	
Sergio.savaresi@polimi.it +39.02.2399.3545 https://www.deib.polimi.it/eng/people/details/358496 MOVE research group: https://www.move.deib.polimi.it/	

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	700.0 €
By number of months	6

Additional information: educational activity, teaching assistantship, computer availability, desk availability, any other information
<p>This PhD is fully funded within the National Recovery and Resilience Plan (NRRP), Mission 4, Component 2 Investment 1.4, funded from the European Union - NextGenerationEU. Call for Strengthening of research structures and creation of R&D "innovation ecosystems", set up of "territorial leaders in R&D"</p> <p>NAME OF THE National CENTER: Centro Nazionale Mobilità Sostenibile</p> <p>The "Centro Nazionale Mobilità Sostenibile" (CNMS) will be a key initiative in Italy, to boost R&D and competitiveness in the mobility-related technologies. The PhD program specifically refers to the "Spoke#6" (Autonomous and Connected Mobility), where Politecnico di Milano will be mainly focused on the development of technology for the assisted or semi-autonomous high-performance vehicles</p> <p>LIST OF UNIVERSITIES, COMPANIES, AGENCIES AND/OR NATIONAL OR INTERNATIONAL INSTITUTIONS THAT ARE COOPERATING IN THE RESEARCH: University of California at Berkeley; University of Alabama; Ferrari; Dallara</p> <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</p>



5.707,13 Euro per student

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.

COMPUTER AVAILABILITY: individual use

DESK AVAILABILITY: individual use