THE PHD PROGRAM IN COMPUTER AND CONTROL ENGINEERING

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DEPT. OF CONTROL AND COMPUTER ENGINEERING

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GOAL OF THE PHD CURRICULUM

To train the students to become high-level researchers able to

- Effectively compete with PhD students from similar institutions
- Fill research positions in academia and industry.

At the end of the curriculum, a PhD student should be able to autonomously perform research. This means:

- Identifying promising research areas
- Acquiring deep skills in the area
- Devising, developing and evaluating innovative ideas and solutions
- Disseminating them in the worldwide research community (writing papers, presenting his/her work at conferences)
- Interacting with other researchers from industry or academia
- Attracting resources (i.e., preparing successful research projects)
- Tutoring students
- …

PHD ACTIVITIES

Each PhD student

- is followed by a supervisor
- works on a specific research project
- is integrated and works in a research group within POLITO
- studies the literature and state-of-the-art in his/her area of interest
- follows some ad hoc courses (on specialized or interdisciplinary topics)
- may also be involved in some active teaching activities (e.g., following labs).

PHD GOALS

The goal of a PhD student is to make research

Hence, he/she is expected to

- develop new ideas
- prove their effectiveness/limitations (normally in an experimental manner)
- submit papers to conferences and journals
- present papers at conferences and interact with the worldwide research community in his/her field

PhD students are also typically involved in research projects

- with companies
- funded by public bodies (e.g., the European Commission).

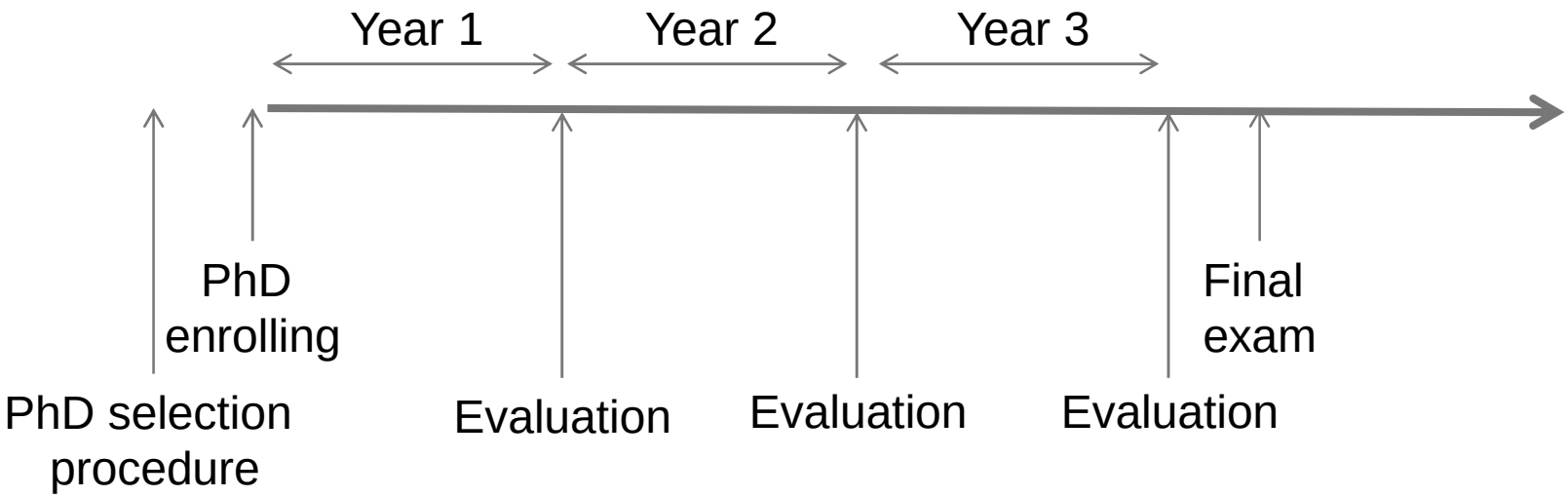
PHD GRANTS

They amount to about 1,200 € / months (net).

This amount is increased by 50% during the period the student possibly stays abroad during his/her PhD.

Each student may receive extra money for his/her possible teaching activities.

PHD CAREER


Year 1
Year 2
Year 3
PhD selection procedure
PhD enrolling
Evaluation
Evaluation
Evaluation
Final exam

THE FINAL EXAM

At the end of his/her PhD period the student

- Is evaluated by the PhD committee
- If the evaluation is positive, he/she prepares a thesis describing his/her work and achievements
- The thesis and his/her achievements are evaluated by two independent reviewers
- If the evaluation is positive, he/she discusses his/her work in front of a commission composed of internal/external researchers
- If the evaluation is positive, he/she receives the PhD degree.

PHD CURRICULUM IN COMPUTER AND CONTROL ENGINEERING

It aims at training new researchers in the area of

- Computer engineering
- Control engineering
- Operational research

It is managed by the Dept. of Control and Computer Engineering (DAUIN)

About 20 PhD positions with grants will be open this year

Grants will come from

- Public bodies (POLITO, Eurecom, ISMB)
- Companies (Telecom Italia).

PHD SELECTION

It is performed once a year

The main steps for the 2015 selection procedure are

- NOW: The PhD committee selects and publishes a set of topics suitable for PhD activities (each with an associated advisor)
- MAY 4: deadline for submitting applications
- JUNE - JULY: a selection committee ranks the applicants and selects the new students, based on their CV and an interview; some minimum requirements are defined and preliminarily checked by POLITO
- OCTOBER: selected students enroll
- NOVEMBER 1: each new student is assigned to the corresponding advisor; the new students start their activities.

PHD SELEC

Suggestions

1. **Look at the research proposals and select those you are interested in**
2. **Enter in touch with the corresponding advisor**
3. **Apply**

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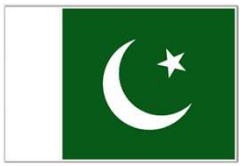
LIST OF NEW PHD STUDENTS FOR 2014





Student	Advisor	Topic
Luca Venturini	Elena Baralis	Classification algorithms for big data, with applications in the urban security domain
Daniel Jahier Pagliari	Enrico Macii	Energy-efficient approximate computing
Farzana Kulsoom	Pietro Laface	Short-utterance speaker recognition
Yukai Chen	Enrico Macii	Simulation of non-functional properties in cyber-physical systems
Francesco Rossi	Alfredo Benso	Integration of Imaging and Systems Biology approaches for advanced CAD (Computer Aided Diagnosis) methodologies.
Amirhosein Toosi	Andrea Bottino	Feature Fusion for Computer Vision and Pattern Recognition
Roberto Bonafiglia	Fulvio Risso	User-Oriented Network Functions Virtualization in an SDN-Enabled Network
Amedeo Sapio	Mario Baldi	Characterization of (Virtualized) Network Functions
Antonio Attanasio	Silvia Chiusano	Mining urban data
Stefano Esposito	Massimo Violante	Multicore architectures for mixed-criticalities applications
Giovanni Piumatti	Fabrizio Lamberti	Multimodal Interfaces for Human-Computer and Human-Robot Interaction
Giorgio Toscana	Basilio Bona	Physical Interaction of Autonomous Robots in Complex Environments
Edoardo Fadda	Guido Perboli	Models and methods for parcel delivery and e-grocery problems
Enea Bagalini	Massimo Violante	Low-cost computing platform for autonomous vehicles
Lorenzo Bottaccioli	Enrico Macii	Modelling and simulation infrastructure for efficient energy management of districts in smart cities
Erion Cano	Maurizio Morisio	Linked data based recommender systems
Rifat Ahmmad Rashid	Marco Torchiano	OpenData: data export models for eDemocracy services
Teodoro Montanaro	Fulvio Corno / Pino Castrogiovanni	Internet of Everything: architectures for the new web of things
Tahir Rizvi	Gianpiero Cabodi	Visual analysis algorithms for embedded systems

PAST PHD STUDENTS

- Edoardo CALIA (1992): now Deputy Managing Director at ISMB, Torino
- Letizia JACCHERI (1995): now Full Professor at the Norwegian University of Science and Technology, Trondheim, Norway
- Rakesh AGARWAL (2006): now Vice President at JPMorgan Chase & Co., Bengaluru, India
- Patricia LAGO (1997): now Full Professor at Vrije Universiteit, Amsterdam, The Netherlands
- Fabio MAINO (1998): now Distinguished Engineer at CISCO, San José, US
- Dante MALAGRINO' (2000): now Chief Product Officer at Embrane, Santa Clara, US
- Davide QUAGLIA (2002): now Assistant Professor at University of Verona
- Riccardo SCANDARIATO (2004): now Senior Lecturer at Chalmers University, Sweden
- Paolo FALCARIN (2004): now Reader at University of East London, UK
- Luis David PRIETO MARTÍNEZ (2005): now Deputy Rector at Universidad Javeriana, Bogotà, Colombia
- Andrea CAPILUPPI (2005): now Lecturer at Brunel University London, UK
- Massimiliano SCHILLACI (2007): now Senior Engineer at STMicroelectronics, Aosta
- Michelangelo GROSSO (2007): now Senior Engineer at ST-POLITO, Torino
- Leticia BOLZANI (2007): now Associate Professor at PUCRS, Porto Alegre, Brazil
- Jose Alejandro OSPINA (2008): now at Deimos Space, Madrid, Spain
- Niccolò BATTEZZATI (2008): now at Magneti Marelli, Torino
- Alberto TONDA (2008): now Assistant Professor at INRA, France
- Fredy RUIZ (2009): now Assistant Professor at Universidad Javeriana, Bogotà, Colombia
- Alberto SCIONTI (2011): now Assistant Professor at University of Siena
- Cesare CELOZZI (2012): now at CISCO, San José, US
- Federico TOMASSETTI (2013): now Software Architect at Tripadvisor, Dublin, Ireland
- Hafeez UR REHMAN (2014): now Assistant Professor at the National University of Computer & Emerging Science, Pakistan
- Daniele ROLFO (2015): now at Thales Alenia Space, Torino
- Davide SABENA (2015): now at GM, Torino

FOR FURTHER INFORMATION

http://www.phd-dauin.polito.it/index.html