

PHD GRANT IN SIGNAL PROCESSING FOR WIRELESS COMMUNICATIONS IN TECHNICAL UNIVERSITY OF CATALONIA (UPC), BARCELONA

OBJECTIVE

The objective of this call for students is to foster the training of researchers by being engaged full time in a PhD program to carry out a PhD thesis in Technical University of Catalonia (UPC).

REQUIREMENTS

The eligible candidate for the fellowship is a student who, at the moment of the acceptance of the grant, is admitted in the Doctoral program of the Theory of the Signal and Communications Department of Technical University of Catalonia (UPC).

ORGANIZATIONAL SKILLS

The candidate will carry out a PhD thesis, with the purpose of being trained as a researcher in the area of arrays and multichannel signal processing. The main topics in which to develop the PhD thesis are the characterization of current solutions for wireless and satellite systems, the study of alternative solutions, proposals in the literature, the analysis of the strong and weak points, the proposal of innovative solutions, the evaluation and analysis of the results, their possible publication in congresses, magazines and patents.

TECHNICAL SKILLS

Excellent knowledge in communications, especially in the areas of Wireless Networks and Digital Communications.

High Level of English, both spoken and written.

DURATION

The fellowship has a maximum duration of 48 months, counted out since the date of incorporation. The fellowship is renewed on a yearly basis, up to a maximum of 3 renewals, provided the thesis supervisor presents favorable reports.

For the annual renewal of the grant, the PhD candidate will have to present a report about the evolution of the PhD thesis and the development of the research work, endorsed by its director and/or tutor. The report will include the approval of the director of the basic unit in which the student will be assigned.

The monthly gross salary is 1.142 €, for the first two years and it will be paid in 12 instances as a grant. Since the third year and upon the completion of the 48 months, the salary will be 1.173 € /month paid in 14 instances. In this phase a contractual relation will be established between UPC and the PhD candidate. The salary will be paid directly to the beneficiary, once the incorporation has been approved by the department and by the supervisor.

APPLICATION AND DOCUMENTATION

The necessary documentation to be admitted to the selection process has to be submitted in electronic format to ana.isabel.perez@upc.edu and/or aperez@cttc.es. The list of the required documents is:

- (1) Curriculum vitae, indicating research preferences as well as the title of the bachelor and Master Thesis.
- (2) Scanned copy of the complete academic record (of both undergraduate and postgraduate studies, if it is the case).
- (3) Scanned copy of the official academic degrees.

INCOMPATIBLE COMMITMENTS

During the whole duration of the PhD fellowship, the awarded candidates are not allowed to have another labor contract with a third party. The fellowship will be only compatible to:

- Support for conference/workshop or project meeting travels;
- Grants for short stays in other research institutions, issued by other regional, national or international institutions;
- Funding coming from research projects related with the PhD thesis, or teaching activities, but only in sporadic form.

This additional income cannot in any case be higher than the 50% of the annual amount of the fellowship.

The UPC reserves its right to cancel any fellowship, if the latter condition is not met.

By granting these fellowships, the UPC does not make any commitment to hire any of the awarded candidates after his/her graduation.

TEACHING ACTIVITIES

If it is agreed between the PhD candidate and the supervisor, it is possible to cooperate in teaching activities, in any case for less than 60 hours/year. The teaching responsibility will not include the definition of the teaching contents, and the department will have to release a formal certification of the hours devoted by the student to teaching.

RIGHTS AND OBLIGATIONS FOR PhD STUDENTS

The rights for the PhD students admitted to the PhD program are the following:

- a) To receive the salary indicated in this call.
- b) To be provided with proper technical and scientific supervision in order to carry out the research activity under normal conditions.
- c) To access the services offered by UPC and to participate in UPC's activities according to the internal regulation.
- d) To apply to complementary grants for short internships outside Catalunya, in order to complete the training activities related with the PhD thesis. The internship has to be previously approved by the thesis supervisor.

The obligations for the PhD students are the following:

- a) To carry out the activities related with the PhD program; to meet the objectives of this program and those indicated by the PhD thesis supervisor.
- b) To provide UPC with all the information they could require during the evaluation and incorporation processes.
- c) To include UPC as the PhD student's affiliation in the scientific production derived from the developed research activities. In addition, an explicit acknowledgement to the economic support received by UPC should be included in all the research works and in the final thesis.
- d) In case of fellowship withdrawal, to inform the Administration unit of UPC (in particular the Unitat d'Assessorament de Suport Laboral a la Recerca) by means of a letter, at least 15 days before the actual withdrawal.
- e) To take courses or seminars organized by ICE of UPC.

If the student fails to comply with these obligations, the UPC reserves its rights to cancel the fellowship.

OBLIGATIONS OF UPC

The obligations of the UPC are the following:

- a) To execute the contract corresponding to the second phase of the fellowship program.
- b) To provide the PhD students with proper technical and scientific supervision.
- c) To watch over the adequate development of the PhD Thesis.

Notice that the PhD thesis will have to be supervised by a researcher affiliated to UPC and the PhD thesis has to be defended in UPC.

Contact: ana.isabel.perez@upc.edu, aperez@cttc.es