

2 PhD research fellowship positions at the University of Niš, Faculty of Electronic Engineering

Two PhD research fellowship positions are offered at the University of Niš, Faculty of Electronic Engineering, Aleksandra Medvedeva 14, 18000 Niš, Serbia; one in the field of telecommunications and one in the field of control systems. These positions are offered within the framework of the project "Norwegian (NOR), Bosnian (BA) and Serbian (S) cooperation platform for university and industry in ICT R&D – NORBAS" that is supported by the Norwegian Ministry of Foreign Affairs under the program HERD/ICT. The positions will be enrolled in a cotutelle program and eventually receive a degree from both the University of Niš, Faculty of Electronic Engineering and the Norwegian University of Science and Technology.

We seek highly motivated and competent graduated students with a five-year university degree in electrical engineering and computing. Emphasis will be put on personal qualities and potential as a researcher. Excellent English skills, written and spoken, are required.

Applicants must be qualified for PhD studies at NTNU, please see <http://www.ntnu.edu/ime/research/phd> for information about PhD studies at NTNU. It is a prerequisite that the PhD scholar applies for and is granted admission to the NTNU PhD studies as soon as possible after employment.

Applicants for the position in the field of telecommunications should have basic knowledge in the following disciplines: digital telecommunications, modulation techniques, wireless telecommunications, error control coding, mathematics, MATLAB, Mathematica and C⁺⁺. His/her research activities will be in the field of telecommunications theory and error correction codes with applications in the wireless telecommunications systems. The PhD dissertation will be supervised by Prof. Dr. Goran T. Đorđević at the University of Niš, Faculty of Electronic Engineering and cosupervised by Ass. Prof. Kimmo Kansanen at the Norwegian University of Science and Technology.

Applicants for the position in the field of control systems should have extensive knowledge in the area of control systems theory, and some knowledge of programming, modeling and simulation using tools such as Matlab, Mathematica and C⁺⁺. Knowledge of Model Predictive Control (MPC) and sliding mode control is an advantage. Sliding mode control and MPC are control approaches with very different advantages and disadvantages, and the research will attempt to combine the advantages of both approaches. The PhD dissertation will be supervised by Prof. Dr. Dragan Antić at the University of Niš, Faculty of Electronic Engineering and cosupervised by Prof. Dr. Morten Hovd at the Norwegian University of Science and Technology.

During PhD studies the candidates will spend 12 months at the Faculty of Information Technology, Mathematics and Electrical Engineering, Norwegian University of Science and Technology (NTNU) in Trondheim. The research activities at NTNU will be realized during several time intervals.

The scholarship will cover the living costs at the Faculty of Information Technology, Mathematics and Electrical Engineering, Norwegian University of Science and Technology (NTNU) in Trondheim and the salary during the project duration according to Serbian financial rules.

The application should contain:

- 1) Motivation letter with two recommendation letters.
- 2) Information of educational background and previous experience (CV).
- 3) Certified copies of university diploma and list of all exams marks.
- 4) Certificate of English language knowledge, publications and any other work which the applicant wishes to be taken into account.

The applications should be sent to: University of Niš, Faculty of Electronic Engineering, Aleksandra Medvedeva 14, 18000 Niš, Serbia (NORBAS PhD application).

Application deadline: March 6, 2012.

The information about PhD studies at the University of Niš, Faculty of Electronic Engineering and Norwegian University of Science and Technology, Faculty of Information Technology, Mathematics and Electrical Engineering can be found at:

<http://www.elfak.ni.ac.rs> and <http://www.ntnu.edu/ime/research/phd>, respectively.

More detailed information can be obtained on address:

University of Niš, Faculty of Electronic Engineering, Aleksandra Medvedeva 14, 18000 Niš, office 105, phone: +381 18 529105, fax: +381 18 588399, e-mail: goran@elfak.ni.ac.rs for telecommunications applicants and e-mail: dragan.antic@elfak.ni.ac.rs for control systems applicants.