

July 8, 2009

CONTROLLING NON-LINEAR SYSTEMS UNDER DELAY CONSTRAINTS

A **PhD position** is available on *CONTROLLING NON-LINEAR SYSTEMS UNDER DELAY CONSTRAINTS* under the supervision of Prof. Rifat Sipahi at the Department of Mechanical and Industrial Engineering, Northeastern University located in the heart of Boston. This project is a continuation of our most recent developments in the field of time delay systems and control theory, and it involves both theoretical and experimental work. Successful candidate will have strong background on control theory, dynamic systems and mathematics; he/she is *required* to have a Master's degree in a field (including but not limited to engineering, physics, applied mathematics) relevant to the scope of the project; he/she has excellent skills in using Matlab, Simulink and a symbolic manipulator (e.g. Mathematica, Maple, Matlab's Symbolic toolbox). It is also *desirable* that the candidate has hands-on experience on feedback control, and theoretical background on Model Predictive Control, Graph Theory and Differential Equations. It is *expected* that the candidates have excellent GRE and TOEFL (if necessary) scores, and they have strong communication and writing skills. It is *preferable* that candidates personally wrote and published articles in journals or conferences under supervision and gave scientific talks in their Master's studies.

The candidate is hard-working, creative, problem-solver and dedicated to research; he/she will not only be responsible with research progress, but he/she will also attend to and present his/her work at national and international conferences; he/she will have opportunities in partially participating in outreach activities during summers; partially supervising undergraduate senior design projects and performing research at one of the top French national research laboratories around Paris area for four months.

The position covers both stipend (that will be paid to student biweekly) and tuition. The project is to start off by either September 2009 or January 2010, and the interested applicants should follow the two steps below:

1. Send Prof Rifat Sipahi (contacts below) by email your (a) resume (including your GPAs in both BSc and MSc, GRE and TOEFL scores), (b) at most two relevant publications or scientific reports, (c) copy of your Master's thesis (if in English), (d) contacts of three references, one of which is your Master's thesis advisor, (e) BSc and MSc transcripts, (f) a phone number you can be reached at (include your country code).
2. Prof. Sipahi will get back to the candidate and encourage him/her to apply to the Department of Mechanical and Industrial Engineering through the Graduate School at the College of Engineering.

Contacts:

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