

NORWEGIAN UNIVERSITY OF SCIENCE AND TECHNOLOGY (NTNU)
Faculty of Information Technology, Mathematics and Electrical Engineering
Department of Engineering Cybernetics

PhD research fellowship position at Department of Engineering Cybernetics within nonlinear model predictive control

There is a PhD research fellowship position vacancy at the Department of Engineering Cybernetics, to work with next-generation optimization-based predictive control. The position is offered for a period of 4 years, 25% of which goes into mandatory work for the Department.

Optimization-based predictive control (or nonlinear model predictive control) has reached a fairly mature stage as far as basic theory and numerical algorithms are concerned. However, there is still progress to be made when it comes to how to combine good control performance with economic performance, particularly during large load changes, product grade changes, etc. The successful candidate will improve state-of-the-art by developing new formulations with analysis of closed-loop properties. The work will take place in an active research group with industrial and international interactions.

Applicants must have a MSc (or siv.ing.) degree in control systems or similar. Solid scientific qualifications, relevant MSc research topics and personal qualities are important. Foreign applicants must document a TOEFL score of 600 or higher. The goal of the announced position is to obtain a PhD degree, hence the successful applicant must be enrolled as a PhD student at NTNU, please see <http://www.ime.ntnu.no/english/research/phd> for information about PhD education at NTNU.

The applicants are encouraged to contact Professor Lars Imsland (Lars.Imsland@itk.ntnu.no) for more information.

The position is placed in salary code 1017, which currently corresponds to a yearly gross income of NOK 355 400 up to 471 700 (pay scale level 45 - 61). From this 2 % will be deducted for mandatory membership in the National Pension Fund.

The appointment will be made in accordance with current regulations with supplementary rules for research fellowship appointments in universities and polytechnics. Applicants must agree to participate in organized doctoral study programs within the period of the appointment. The successful applicant must agree to the conditions laid down for public employees.

Candidates will be required to enroll in a PhD program within the period of employment, and must sign a contract regulating the period of employment and the mandatory work.

According to Norwegian policies, the government workforce should, as closely as possible, reflect the diversity of the population at large. It is therefore a goal of NTNU, as a government institution, to have a workforce which is balanced with respect to age and gender, and to recruit persons of immigrant background. Persons of immigrant background are encouraged to apply. NTNU also wishes to increase the number of women on its workforce, and women are specifically encouraged to apply.

The application must include information about education, exams and earlier experience. Certified copies of certificates and diplomas must be enclosed. Relevant scientific works should be submitted in triplicate. Joint works will be taken into account. In cases where it is difficult to determine the applicant's contribution, a short note of explanation should be supplied.

Applications are to be sent to the Norwegian University of Science and Technology (NTNU), Faculty of Information Technology, Mathematics and Electrical Engineering, NO-7491 Trondheim, Norway, or by e-mail to: application@ime.ntnu.no (This address is for complete applications only. Enquiries to this address will not be answered).

Applications should be marked: IME 051-2009.

Closing date: September 30th 2009.