NTNU

Kunnskap for en bedre verden

Jobbnorge-ID: 70934
Søknadsfrist: Avsluttet
Nettside:
Omfang:
Varighet:

11 Ph.D. Fellowships in Smart Grid Research

The SmartGrid is envisioned as the future intelligent electricity delivery, production and consumption management system. It shall enable a more efficient house-holding with energy, reduce the consumption and allow a large variety of new and greener means of production. This pose a wide range of demanding research challenges involving power engineering, ICT and cybernetics. At NTNU we aim at establishing a national centre for SmarGrid research in co-operation with industries, public bodies and other actors.

To further increase our research in this area we would like to recruit 11 ph.d. fellows for 7 projects, spanning all of the Faculty of Information Technology, Mathematics and Electrical Engineering's six departments:

- Computer and Information Science
- Electric Power Engineering
- Electronics and Telecommunications
- Engineering Cybernetics
- Mathematical Sciences
- Telematics

A: Smart operation and control in power transmission networks, Three fellowships
1.Secure control of multi-terminal HVDC, Dept. of Electric Power Engineering.
2. Wide area monitoring and control, Dept. of Engineering Cybernetics
3. MPC for balancing control, Dept. of Engineering Cybernetics
Contact: Professor Kjetil Uhlen; +47 7359 7204; Kjetiluh@elkraft.ntnu.no

B: Identification of potential instability in AC distributed multi-converter system under non-ideal electrical conditions
One fellowship at Dept. of Electric Power Engineering
Contact: Professor Marta Molinas;+47 7359 4240; Marta.Molinas@elkraft.ntnu.no

C: SmartGrids as a critical infrastructure
One fellowship at Dept. of Telematics
Contact: Associate Professor Poul E. Heegaard; +47 7359 4321; poul.heegaard@item.ntnu.no

D: Reliability Analysis of Wind Energy Systems
One fellowship at Dept. of Mathematical Sciences
Contact: Professor Bo Lindqvist; +47 7359 3532; bo@math.ntnu.no

E: Integrated communications and control, Two fellowships
1. Control system design for unreliable communication networks; Dept. of Engineering Cybernetics
2. Integrated design of wireless communication and control systems; Dept. Electronics and Telecommunications
Contact: Professor Tor Arne Johansen; +47 7359 0395; tor.arne.johansen@itk.ntnu.no.

F: Improved Management of Software Evolution for SmartGrids applications, Two fellowship
1. Open Source Software in SmartGrids; Dept. of Computer and Information Science
2. Evaluation of Software Application Portfolios; Dept. of Computer and Information Science
Contact: Professor Reidar Conradi; +47 7359 3444; Reidar.Conradi@idi.ntnu.no

G: Energy Efficient Parallelization of SmartGrid Computations on Novel Multicore Processors
One fellowship at the Dept. of Computer and Information Science
Contact: Professor Lasse Natvig; +47 7359 3685; Lasse.Natvig@idi.ntnu.no

For further information about the projects and fellowships, see http://ime.ntnu.edu/research/smartgrid

Within the application, it should be clearly stated for which fellowships it is applied, by indicating project(s) A - G, and for projects with more fellowships, for which fellowship, e.g. A.1 - A.3. If it is applied for more than one fellowship, the applicant's priorities with respect to the fellowships must be stated.

Applicants from non-English speaking countries outside of Europe must document a TOEFL score of 600 or higher or a score of 100 or higher if the on-line test is being used.
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.ntnu.edu/ime/research/phd for information about PhD education at NTNU.

NTNUs PhD-rules require a Master degree or equivalent with at least 5 years of studies and an average grade of A or B within a scale of A-E for passing grades (A best). Candidates from universities outside Norway are kindly requested to send a Diploma Supplement or a similar

document, which describes in detail the study and grade system and the rights for further studies associated with the obtained degree: http://ec.europa.eu/education/policies/rec_qual/recognition/diploma_en.html

The position is placed in salary code 1017, which currently corresponds to a yearly gross income of NOK 383 700 (pay scale level 48). 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.

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 gender, and to recruit persons of immigrant background. 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. 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 submitted electronically through this page. Preferably, we want the attachments in one file.

Applications should be marked: IME 045-2010.
Application deadline: January 15th, 2011.

Tilleggsinformasjon

Arbeidssted: