

Ph.D. project in Computer Science (Verdione project) at The Faculty of Science and Technology, Department of Computer Science, University of Tromsø, Norway

The University of Tromsø has two Ph.D. project scholarships open in Computer Science (Verdione project).

The period of appointment is three years.

The University of Tromsø and Tromsø University College have merged, and from 1. August 2009 the Faculty of Science and Technology will consist of the following departments: Department of Physics and Technology, Department of Geology, Department of Computer Science, Department of Chemistry, Department of Mathematics and Statistics and Department of Engineering and Safety.

The research activities at the Department of Computer Science are primarily in system aspects of distributed and parallel systems.

The position is attached to the Verdione (Virtually Enhanced Real-life synchronized Interaction - ON the Edge) project. Verdione targets cooperative applications that merge virtual elements into the real world. The main application domain is the World Opera (WOP). The ultimate goal is for users, including musicians, actors, singers and spectators, to become immersed in a virtual reality that includes their local environment, and where users' arbitrary actions can be disseminated to their remote communication partners.

One Ph.D. project will focus on merging physical and virtual realities. Artists and the audience at one location must blend with the other participating locations into a coherent presentation, merging the local physical reality with the visualization of the remote locations. The research is systems oriented where systems are designed, implemented and experimented upon.

The other Ph.D. project will focus on the coherence, consistency, causality and synchronicity arising when combining distributed physical and virtual realities. The research is systems oriented where systems are designed, implemented and experimented upon.

Verdione is 4 year research project funded by the Norwegian research council. The project has several Norwegian and international cooperation partners, including Simula, University of Tromsø, University of Oslo, Telenor R&I and LIVIDI, and through the World Opera consortium, McGill University, Stanford University, New York University, and the opera institutions (companies/academies) in Montreal, New York, San Francisco, Malmö, Copenhagen, Stockholm and Milano.

The employer will be the University of Tromsø. The working place will primarily be at the Department of Computer Science, High Performance Distributed Computing group. There will be close cooperation with other Verdione-scholars and artists at the Academy of Music, Faculty of the Arts, and the World Opera.

The successful applicant must document knowledge and proficiency in Computer Science at Master's level. A Master's degree in architecture, computer science, design, media studies, interactive media and similar fields are beneficiary. Further, the successful applicant must fulfill the requirements for admission to the faculty's Ph.D. programme in Science (Computer science), cf. Section 5 (Chapter II) of *Regulations for the degree of Philosophiae Doctor (Ph.D.) at The University of Tromsø*, <http://uit.no/forsknave/ph.d.-forskrift/1> and the faculty's supplementary regulations.

The applicant should have a solid background in and experience with distributed and parallel systems, display walls, device-free multi-user interfaces and be able to build working prototypes. Experience developing and experimenting with interfaces for specific application domains, and in particular for artistic purposes, is interesting.

The PhD study is standardized to three years and the normal period of appointment is equivalent. A shorter period of appointment may be given if the research fellow has already completed parts of his/her researcher's education, or when previous appointments to educational positions (research fellow, research assistant or equivalent) are counted as part of the duration of the research fellowship, so as the combined duration of the researcher's education is three years.

Remuneration is in accordance with the State wage scale code 1017, pay grade 45, approximately NOK 353 000 per annum. A compulsory contribution of 2 % is made to the Norwegian State Pension Fund.

The successful candidate must apply separately for admission to the Ph.D. study as quickly as possible after appointment and no later than one month after commencement. Admission to the doctoral degree programme must be obtained within two months after commencement and a final plan for the researcher education must be approved and regulated by contract. The plan is to state who is responsible for providing academic supervision. Admission to the doctoral degree programme is a prerequisite for appointment to Ph.D. scholarships. If an admission contract has not been signed within the deadline, as stated in the work contract, the employer may consider cancelling the work contract, cf. § 1-3 (8) in *Regulations for conditions of appointment to post doctoral positions, research fellowships, research assistants and specialist candidates* (in Norwegian only): <http://www.lovdatab.no/for/sf/kd/kd-20060131-0102.html>

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