

Application for mobility from industry

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Funding amounting to 100kSEK is sought for enabling a sabbatical, by a highly experienced industrial engineer, to an ARTES node, the Mechatronics lab at KTH. KTH will fund another 100kSEK enabling around a three to four month stay at KTH.

The basic idea is to transfer important industrial experience to academia. A part of this knowledge will be documented in the form of a course module to be incorporated into an ARTES PhD student course given by KTH, as well as into undergraduate education at KTH. In addition, the person in question will provide feedback and discussions with the active ARTES students/projects at the node.

The person in question, Carl-Erik Strandberg has 27 years of experience in designing and assessing software for critical embedded systems, including medical devices, see CV for details.

Carl-Erik has expressed an interest in taking a sabbatical, with the primary aims of getting a new perspective and to learn more.

Carl-Erik has well documented experiences in the areas of systems and software engineering for safety critical real-time systems, in particular dealing with architectural design, risk analysis, software design and quality management. The 27 years of experience also includes other work such as requirements engineering, project management, configuration management etc.

The proposed activities during the sabbatical and the expected results are as follows:

- to support ARTES PhD students and projects at KTH/mechatronics, including Jad Elkhoury (project AIDA2), DeJiu Chen (project MARCH), Jonas Norberg (project FINE, to start in December), Martin Sanfridson (project DICOSMOS) and Ola Redell (project PICADOR).
- develop a software engineering course module, jointly with Martin Törngren and possibly others at the Mechatronics lab, to be included in an ARTES PhD student course. KTH/Mechatronics has so far been developing and giving two PhD student courses within the Artes graduate school. Real-time computer control systems is a basic course for PhD students, the next instance is in January 2001. The other course, Design of Software for Real-time Control systems, is currently being revised and here an updated software engineering module would fit very well. There is also a shortage of undergraduate courses in this area at KTH, we see a very good possibility of utilizing this module in a final year KTH MSc. level course.

We believe that the experiences and interests of Carl-Erik Strandberg would make him highly suitable considering the research that we are carrying out. We would like to emphasize the shortage of courses in this area that really bridge theory and practice, and that provide an industrial perspective with experiences from systems development.

We feel that this is a good and somewhat unusual opportunity and therefore hope for support from ARTES.

Regarding the timing for the mobility, the sabbatical could in principle start as early as in December. The spring 2001 has been identified as a suitable period.

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Enclosure: CV of Carl-Erik Strandberg