

Curriculum Vitae

Markus Bylund, PhD, Senior Researcher

Markus Bylund (born 1971) is a senior researcher at the Swedish Institute of Computer Science, Kista, Sweden. Bylund holds a PhD (2005) in Computer and Systems Sciences from the Royal Institute of Technology (KTH) in Stockholm, Sweden. He received both his M.Sc. (1999) and Ph.Lic. (2001) from Uppsala University, Sweden, in part based on studies (1996-1997) from the University of Colorado at Boulder (CU), USA.

Bylund's research interests concerns aspects of information and communication technology (ICT) in general, but aspects regarding the end-user situation in particular. This includes infrastructure support for pervasive service use, value-based conflicts associated with ICT service use (such as privacy considerations), and issues regarding the context of use. These interests are reflected in Bylund's Ph.D. dissertation titled "A Design Rationale for Pervasive Computing—User Experience, Contextual Change, and Technical Requirements" (KTH, 2005).

Since 2001, Bylund has managed a number of research activities at SICS, most notably the VINNOVA funded projects ADAPT regarding adaptations of end user ICT services, and SAITS regarding privacy in the information society. Bylund currently manages the two projects Solid and Prima (see below).

Education

- *PhD in Computer and Systems Sciences* (2005), Royal Institute of Technology (KTH) (2002-2005), Stockholm, Sweden
- Graduate/undergraduate studies in computer science, University of Colorado at Boulder (1996-1997), CO, USA
- *PhLic in Computer Science* (2001), *MSc in Computer Science* (1999), Uppsala University (1993-2001), Uppsala, Sweden
- *Degree of Electronics Engineering* (1992), Royal Institute of Technology (KTH) (1990-1992), Stockholm, Sweden

Experience

- 1997-present, Researcher/Senior researcher, Swedish Institute of Computer Science, Kista, Sweden
- 1996-1997, Internship programmer (programming languages, compilers, and runtime systems), Objective Inc., Boulder, Colorado, U.S.A.
- 1995-1996, Computer consultant (operating systems programming), Plandata AB, Kista, Sweden

Project management

Bylund has been project manager of more than half a dozen research projects ranging from six months to four years long. Bylund currently manages two research projects at SICS.

- Solid, 2006- (granted SEK 3.600.000 for the duration of three years from VINNOVA). The overall goal of the Solid project is to make available concrete mechanisms for

improving security and robustness of personal information-based information and communication technology (ICT) services. In particular, the project acknowledges that neither security nor robustness is achieved as a result of single mechanisms. Rather, security and robustness must be seen as a result of a whole chain of mechanisms covering issues ranging from user experience to algorithms for information processing. With the complete chain of mechanisms as a backdrop, the project will focus on weak links in order to ensure secure and robust personal information-based ICT services as a whole.

- Prima, 2006- (granted DKK 4.800.000 for the duration of four years from NorduNet3). The Prima project provides concrete means to successfully guide and manage privacy in the context of future information and communication technologies. Based on an inter-disciplinary Nordic and North-American network of experts within the disciplines of computer science, social science, and law, this is achieved by collaboration with related projects in which the partners of the project consortium are active. The main deliverable of the Prima project will be a methodology for guiding designers of information systems to take into account privacy issues early in the design process, as illustrated by numerous case studies of related new and emerging information and communication technologies.

Recent commissions include the management of the ADAPT, SAITS, and AWARE projects.

- ADAPT, 2001-2004 (granted SEK 2.700.000 from VINNOVA). The ADAPT project investigated automatic adaptation of services in open systems (e.g. the World Wide Web) as a means to meeting the challenges that diverse user groups and sets of devices pose to service providers. The project treated general aspects of automatic adaptation in open systems to some degree, but the emphasis was placed on two areas: adapting towards preferences of users and adapting towards properties of devices.
- SAITS, 2002-2005 (granted SEK 3.600.000 from VINNOVA). The SAITS project investigated the meaning and significance of the term privacy in emerging IT environments, how the technological development creates privacy risks as well as possibilities to protect and enhance privacy, and how regulations can control how different actors behaves in IT environments. The project involved three partners with expertise in computer science, law, and civil rights, as well as an active reference group consisting of over a dozen participants representing industry and government organizations. The direct results of the SAITS project were in the form of reports and public seminars and workshops that described privacy from a number of viewpoints. During its three years the project produced three workshops, 15 seminars, and more than 60 professional articles (two thirds in daily press).
- AWARE, 2003-2004 (no public funding). In collaboration with SUN Microsystems, we conducted two studies of the relationship between information and communication technology use and the user context. The studies revealed that users of information and communication technologies are very much aware of privacy issues related to these technologies. While this is well in line with literature on the topic, the results also indicate a width in interpreting privacy that is rarely acknowledged in the current discourse.

Publications

For a full record of publications, please see www.sics.se/~bylund.

Teaching and Student Supervision

- About a dozen master's theses (corresponding to six months full-time work) supervised in several areas of computer science.
- Co-supervised one PhD thesis in human-computer interaction.
- Teaching and managing courses in Intelligent User Interfaces at the University of Uppsala and Stockholm University.

Other academic achievements

- Workshop program committees: 7th ERCIM Workshop UI4ALL 2002, Paris (Chantilly), France; 8th ERCIM Workshop UI4ALL 2004, Vienna, Austria; 9th ERCIM Workshop UI4ALL 2006, Königswinter (Bonn), Germany
- Conference review: IAT 2005, ISWC 2005
- Journal review: Automated Software Engineering (Springer), Journal of Systems and Software (Elsevier), Transactions on Computer-Human Interaction (ACM)
- Reviewing for Universities: external reviewer of the PhD thesis of Mika Raento, Univ. of Helsinki, Finland, 2008; opponent during the public PhD defense of Sami Karjalainen, Helsinki Univ. of Technology, Finland, 2008