Prof. Fredrik Gustafsson

Affiliation: Linköping University, Sweden
Email: fredrik.gustafsson@liu.se
URL: www.control.isy.liu.se/~fredrik

Short Biography

Fredrik Gustafsson is professor in Sensor Informatics at Department of Electrical Engineering, Linköping University, since 2005. He received the M.Sc. degree in electrical engineering 1988 and the Ph.D. degree in Automatic Control, 1992, both from Linkping University.

He is a co-founder of the companies NIRA Dynamics (automotive safety, including tire pressure monitoring systems found in more than 40 million cars today), Softube (plug-ins used in tens of thousands of music studios), and Senion (indoor navigation for smartphones deployed in more than 30 countries in all six continents).

He has supervised 25 PhD and more than 200 master theses. He is the author of five books, more than 200 conference papers, 100 journal papers and some 30 patents. His current h-index is 54 (Google Scholar).

He was an associate editor for IEEE Transactions of Signal Processing 2000-2006, IEEE Transactions on Aerospace and Electronic Systems 2010-2012, and EURASIP Journal on Applied Signal Processing 2007-2012. He was awarded the Arnberg prize by the Royal Swedish Academy of Science (KVA) 2004, elected member of the Royal Academy of Engineering Sciences (IVA) 2007, and elevated to IEEE Fellow 2011. In 2014, he was awarded a *Distinguished Professor* grant from the Swedish Research Council.

He was awarded the Harry Rowe Mimno Award 2011 for the tutorial "Particle Filter Theory and Practice with Positioning Applications", which was published in the AESS Magazine in July 2010, and was co-author of "Smoothed state estimates under abrupt changes using sum-of-norms regularization" that received the Automatica paper prize in 2014.

Position Statement

My research areas in sensor fusion and target tracking have strong roots in the defense and space industry, where we have seen a strong demand and many seminal contributions over the years.

Today, we have ample of opportunities in society for the core areas within the scope of the ISIF organization. My vision is that civilian applications and problems originating from these domains should have more visibility at for instance the Fusion conference. This can be realized by the choice of plenary speakers, selection of topics in the call for papers, invited sessions in different domains, new working groups and how we communicate outside our community through websites *etc.*