List of publications  
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Working manuscripts


Peer reviewed journal papers


**Editorials**


**Debate articles**


**Peer reviewed book chapters**


**Peer reviewed conference papers**


[C99] Lawrence M. Murray, Daniel Lundén, Jan Kudlicka, David Broman and Thomas B. Schön. **Delayed sampling and automatic Rao-Blackwellization of probabilistic programs.** In *Proceedings of the 21st International Conference on Artificial Intelligence and Statistics (AISTATS)*, Lanzarote, Spain, April, 2018. *(Oral presentation)*


[C91] Andreas Svensson, Arno Solin, Simo Särkkä and Thomas B. Schön. **Computationally efficient Bayesian learning of Gaussian process state space models.** In *Proceedings of the 19th International Conference on Artificial Intelligence and Statistics (AISTATS)*, Cadiz, Spain, May, 2016.


[C52] Soren Henriksen, Adrian Wills, Thomas B. Schön and Brett Ninness. Parallel implementation of particle MCMC methods on a GPU. In Proceedings of the 16th IFAC Symposium on System Identification (SYSID), Brussels, Belgium, July 2012.


[C46] Zoran Sjanic, Martin A. Skoglund, Thomas B. Schön and Fredrik Gustafsson. **A nonlinear least-squares approach to the SLAM problem.** In *Proceedings of the 18th World Congress of the International Federation of Automatic Control (IFAC)*, Milan, Italy, August-September 2011.


[C28] Thomas B. Schön and Jacob Roll. Ego-motion and indirect road geometry estimation using night vision. In Proceedings of the IEEE Intelligent Vehicle Symposium (IV), Xi’an, Shaanxi, China, June 2009.


Thomas B. Schön, Andreas Eidehall, and Fredrik Gustafsson. **Lane departure detection for improved road geometry estimation.** In *Proceedings of the IEEE Intelligent Vehicle Symposium (IV)*, Tokyo, Japan, June 2006.

Thomas B. Schön, Adrian Wills, and Brett Ninness. **Maximum likelihood nonlinear system estimation.** In *Proceedings of the 14th IFAC Symposium on System Identification (SYSID)*, Newcastle, Australia, March 2006.


Thomas B. Schön and Fredrik Gustafsson. **Integrated navigation of cameras for augmented reality.** In *Proceedings of the 16th World Congress of the International Federation of Automatic Control (IFAC)*, Prague, Czech Republic, July 2005.

Andreas Eidehall, Thomas B. Schön, and Fredrik Gustafsson. **The marginalized particle filter for automotive tracking applications.** In *Proceedings of the IEEE Intelligent Vehicle Symposium (IV)*, Las Vegas, NV, USA, June 2005.


Thomas Schön and Fredrik Gustafsson. **Particle filters for system identification of state-space models linear in either parameters or states.** In *Proceedings of the 13th IFAC Symposium on System Identification (SYSID)*, pages 1287–1292, Rotterdam, The Netherlands, September 2003.


**Relevant national conference papers**


Andreas Svensson and Thomas B. Schön. **Comparing two recent particle filter implementations of Bayesian system identification.** In *Proceedings of Reglermötets (Swedish Control Conference)*, Göteborg, Sweden, June 2016.


Limited peer reviewed workshop, conference papers and abstracts


Christian A. Naesseth, Fredrik Lindsten and Thomas B. Schön. Sequential Monte Carlo to estimate the partition function of rectangular graphical models. In *Second Bayesian Young Statisticians Meeting (BAYSM)*, Vienna, Austria, September, 2014.


Technical reports not published elsewhere


Thomas B. Schön and Fredrik Lindsten. Manipulating the multivariate Gaussian density. Division of Automatic Control, Linköping University, Linköping, Sweden, January 2011.


**Theses**

