

Judith Bütepage

Judith Bütepage **Education**

E-Mail: **KTH - Royal Institute of Technology** 15/7/2015 - pre
butepage@kth.se *PhD student.* Robotics, Perception and Learning Lab
Advisors: Danica Kragic and Hedvig Kjellström

languages

german

(mother tongue)

english & swedish

(fluent)

KTH - Royal Institute of Technology 01/09/2014 - pre
M. Sc.. Machine Learning

programming

Python, C++,

Matlab, Java &

Prolog

University of Osnabrück 01/10/2010 - 23/06/2014
B. Sc.. Cognitive Science - Graduated with distinction
2012-2013, Erasmus student, Lund University

ML libraries

Tensorflow, Theano,

Keras & Numpy

Research & Professional Experience

Disney Research Pittsburgh 07/05/2017 - 10/27/2017

Internship. Statistical Machine Learning Group

Project a): Deep generative models for joint multimodal embeddings.

Project b): Advances in Variational Inference.

Supervisors: Stephan Mandt, Leonid Sigal and Cheng Zhang

ML expertise

Deep Learning,

Generative Models,

Reinforcement

Learning &

Probabilistic

Modeling

Max-Planck Institute for Intelligent Systems 04/15/2016 - 07/15/2016

Internship. Perceiving Systems Group

Project: Deep Gaussian Processes for action recognition and transfer learning under supervision of Michael Black.

Current ML

obsession

Variational

autoencoders and

amortized inference

KTH - Royal Institute of Technology 02/01/2015 - 05/31/2015

Student research assistant. Computer Vision and Active Perception Lab

Project: Creation of a database of 3D object models for grasp planning and other robotic applications.

Homepage

www.

csc.kth.se/ butepage/

Dep. of medical physics, Uni. of Oldenburg 08/01/2013 - 10/31/2013

Student research assistant. Statistical signal models research group

Project: Combination of complex features and Support Vector Machines in order to enhance the analysis of spatio-temporal receptive fields within the auditory pathway at the Department of medical physics.

Dep. of Exp. Medical Sciences, Lund Uni. 02/01/2013 - 05/31/2013

Project student. Integrative Neurophysiology and Neurotechnology Group

Project: Neural data analysis of spatial representations in the motor system of the brain.

Inst. of Cognitive Science, Uni. of Osnabrück 09/01/2012 - 12/31/2012
Student research assistant. Neuroinformatics department
 Project: Identification of the information content in single cell spike data and local field potential by applying Nested Logistic Regression Models.

Teaching Experience

Autumn '15 - Machine Learning Reading Group (PhD), KTH.

Autumn 2018: Artificial Intelligence (Msc), KTH.

Autumn 2017: Machine Learning Advanced (Msc), KTH.

Autumn 2016: Artificial Intelligence, ML Advanced(Msc), KTH.

Spring 2016: Search Engines and Information Retrieval (Msc), KTH.

Autumn 2015: Artificial Intelligence, ML Advanced (Msc), KTH.

Publications

Bütepage, J. and Black, M. and Kragic, D. and Kjellström, H. (2018) Anticipating many futures: Online human motion prediction and synthesis for human-robot collaboration *ICRA, 2018*

Zhang, C. and Butepage, J. and Kjellström, H. and Mandt, S. (2017) Advances in variational inference *arXiv preprint arXiv:1711.05597*

Bütepage, J. and Kragic, D. (2017) Human-Robot Collaboration: From Psychology to Social Robotics *arXiv preprint arXiv:1705.10146*

Bütepage, J. and Black, M. and Kragic, D. and Kjellström, H. (2017) Deep representation learning for human motion prediction and classification *CVPR, 2017*

Pokorny, F. T. and Bekiroglu, Y. and Pauwels, K. and Bütepage, J. and Scherer, C. and Kragic, D. (2017) CapriDB-Capture, Print, Innovate: A Low-Cost Pipeline and Database for Reproducible Manipulation Research *Data in Brief, Elsevier, 2017*, 11, pp. 491–498

Vesper, C. and Abramova, E. and Bütepage, J. and Ciardo, F. and Crossey, B. and Effenberg, A. and Hristova, D. and Karlinsky, A. and McEllin, L. and Nijssen, S. and others (2016) Joint Action: Mental Representations, Shared Information and General Mechanisms for Coordinating with Others *Frontiers in Psychology*, 7, 2039

Ghadirzadeh, A. and Bütepage, J. and Kragic, D. and Björkman, M. (2016) A sensorimotor reinforcement learning framework for physical Human-Robot Interaction *Intelligent Robots and Systems (IROS), 2016 IEEE/RSJ International Conference on*(pp. 2682–2688). IEEE.

Bütepage, J. and Kjellström, H. and Kragic, D. (2016) Social Affordance Tracking over Time—A Sensorimotor Account of False-Belief Tasks *Proc. 38th Annual Meeting of the Cognitive Science Society (CogSci)*(pp. 1014–1019). Cognitive Science Society.

Ghadirzadeh, A. and Bütepage, J. and Kragic, D. and Björkman, M. (2016) Self-learning and adaptation in a sensorimotor framework *Robotics and Automation (ICRA), 2016 IEEE International Conference on*(pp. 551–558). IEEE.