Curriculum Vitae – Kasper Winther Andersen - 02/05/2016

Personal data

Name: Kasper Winther Andersen
Phone: +45 3862 3328
Date of birth: 09-08-1980
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Scientific profile and focus areas

- 8 years expertise with neuroimaging. International expertise from a 3-year research position in a leading neuro-science lab in the USA.
- Functional magnetic resonance imaging, diffusion weighted imaging, resting state fMRI, multiple sclerosis, network analysis, machine learning, data analysis.

Academic degrees

26/05/2014 **PhD**, Department of Applied Mathematics and Computer Science, Technical University of Denmark.
18/04/2006 **Master of Science** in Engineering, Technical University of Denmark.

Employment

02/2014 – present Postdoc, Danish Research Centre for Magnetic Resonance, Hvidovre Hospital.
12/2010 – 01/2014 PhD Student, DTU Compute, Technical University of Denmark.
05/2010 – 11/2010 Research Assistant, IMM, Technical University of Denmark.
10/2007 – 08/2010 Research Specialist, Department of Psychiatry, University of California, San Francisco, USA.
02/2007 – 09/2007 Postgraduate Associate, Department of Psychiatry, Yale University, USA.
05/2006 – 12/2006 Research Assistant, IMM, Technical University of Denmark.

Scientific qualifications
Ad hoc reviewer: NeuroImage, Human Brain Mapping, Cortex.

Academic awards and honours
Best computer science master's thesis in Denmark 2006
https://sites.google.com/site/dsfdweb/vindere-af-specialeprisen

Travel awards

- ISMRM educational stipend, 2016
- Mønsted 2006, 2011, 2012
- Lundbeck Foundation, 2014

International relations

- Currently collaborating with researchers at:
  - Karolinska Institutet, Stockholm, Sweden
  - Lund University, Lund, Sweden
  - CR Development, AB, Lund, Sweden
  - Rotman Research Institute, Baycrest Centre for Geriatric Care, Toronto, Canada
- Prior to my PhD project I worked 3 years in the Brain Imaging and EEG Laboratory (BIEEGL, http://www.bieegl.net) at Yale University (USA) and University of California, San Francisco (UCSF, USA), directed by Dr. Daniel Mathalon and Dr. Judith Ford. Our lab participated in a multi-center project (fBIRN) with 12 other universities in USA, which has given me a broad network in the neuroimaging community.

Supervision of students

Co-supervisor for 1 postdoc, 4 PhD students, and 5 Master's students at Danish Research Centre for Magnetic Resonance and the Technical University of Denmark.

Software toolboxes and web-demoes developed – publicly available

- fMRI IRM Toolbox   https://brainconnectivity.compute.dtu.dk/?page_id=49
- Kernel PCA toolbox   http://imm.dtu.dk/~kwjo/index.php?page=modelselection
- NMF toolbox   http://cogsys.imm.dtu.dk/toolbox/nmf/
- Castsearch Demo   http://castsearch.compute.dtu.dk

Technical experiences

Programming: Matlab, Python, C/C++, Java, HTML, PHP, MySQL databases, Shell scripting.

Data modeling: Bayesian Network models, kernel methods, General Linear Models, Artificial Neural Networks, Gaussian Mixture Models, K-means, Vector Quantization, K-Nearest Neighbors, Hidden Markov Models, Non-negative Matrix Factorization, Independent Components Analysis, Principal Components Analysis, Genetic Algorithms.

MRI software: SPM, FSL, AFNI, MRTrix.