

Dr. Tobias Morville
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Current

- Nov 17 - **Research Consultant**, *Danish Research Centre for Magnetic Resonance.*
 - o Analysis of imaging data & scientific writing.
- Nov 17 - **Senior Data Scientist**, *2021.ai.*
 - o Design and implementation of client tailored machine learning algorithms.

Academia

- Nov 14 - Oct 17 **Ph.D. in Computational Neuroscience**, *University of Copenhagen.*
 - o Authored Homeostatic Control Theory.
- Oct 12 - Nov 13 **Research Assistant**, *Danish Research Centre for Magnetic Resonance.*
 - o Analysis of behavioural data.
- 2010 - 2013 **M.Sc. in Economics**, *University of Copenhagen.*
 - o Masters thesis on a model of choice using reinforcement learning.
- 2006 - 2010 **B.Sc. in Economics**, *University of Copenhagen.*
 - o Bachelor thesis on econometric time-series modelling.

Research stays

- Aug 15 - Feb 16 **London Mathematical Laboratory**, *Dr. Ole Peters.*
 - o Training in statistical physics and information theory.
- Nov 14 - Feb 16 **The Francis Crick Institute**, *Professor Denis Burdakov.*
 - o Design of optogenetic experimental regime.

Teaching

- Feb 14 - Jul 14 **TA, Neuroimaging Foundations**, *University of Copenhagen.*
 - o A mixture of basic math and statistics made concrete through programming in Matlab and made meaningful by philosophy of science.
- Dec 12 - Jul 13 **External lecturer and supervisor**, *Metropolitan University College.*
 - o A short course on basic statistics, supervision on bachelor thesis level.

Training

Special training

- Aug 16 **Summer School on semi-supervised learning**, *DTU.*
 - o Introduction to supervised, semi-supervised and unsupervised learning.

- Jun 15 **Complex Systems Summer School**, *Santa Fe Institute*.
o Introduction to a broad array of scientific fields within complexity research.
Research project: *Free Energy in Statistical Physics, Information Theory and beyond*.
[P.h.D. courses](#)
Neuroimaging Foundations, *University of Copenhagen, DRCMR*.
Neuroimaging Basics, *University of Copenhagen, DRCMR*.
The Emotional Brain, *University of Copenhagen, CIMBI*.
Statistical Parametric Mapping, *University of Copenhagen, DRCMR*.

Writing

Peer reviewed

- May 16 **Tuning the Brake While Raising the Stake: Network Dynamics during Sequential Decision-Making**, *Journal of Neuroscience*.
[In review](#)
May 16 **Patient profiling for success after weight loss surgery (GO Bypass Study): An interdisciplinary study protocol**, *Contemporary Clinical Trials Communications*.

Working papers

- Reward Signalling under Glycemic Flux.**
The Homeostatic Logic of Reward.
Four Fallacies in the Pursuit of Gambling.

Conference abstracts

- May 16 **Decision-making and the Dynamics of Death**, *The 38th International Symposium of the Groupe de recherche sur le système nerveux central (GRSNC)*.
Nov 15 **The Homeostatic Logic of Reward**, *Society for Neuroscience*.
Jul 14 **The Homeostatic Logic of Reinforcement Learning**, *Workshop on Information Theoretic Incentives for Artificial Life*.

Outreach

- Nov 13 **Rational, as on the savannah (Danish article)**, *Weekendavisen #47 | Ideer | 22. Nov – 28. Nov 2013*.

Talks

- Jan 17 **Neurograduate Symposium at University of Copenhagen**, *Homeostatic Control Theory*.
May 16 **The 38th Symposium of Neuroscience of Decision Making**, *Decision Making and the Dynamics of Death*.

- Nov 14 **Society for Neuroscience**, *The Homeostatic Logic of Reward*.
- Jun 14 **Conference for Artificial Life**, *The Homeostatic Logic of Reinforcement Learning*.
- Mar 13 **CNEE Experimental Economics Workshop**, *Autocorrelation Biases in a Sequential Gambling Task*.
- May 13 **CNEE Neuroeconomics Workshop**, *Homeostatic Reinforcement Learning*.

Experience in industry

- Aug 10 - Jan 14 **Freelance consultant**, *Weekendavisen*.
Implementation and analysis of subscribers database.
- Apr 09 - Mar 12 **Student Researcher**, *DAMVAD consultancy agency*.
Econometric analysis.
- May 08 - Mar 09 **Student Researcher**, *Wealth Management, SEB Enskilda*.
Maintaining performance spreadsheets using visual basic.
- Feb 07 - May 08 **Student Researcher**, *Danish Oil Industry Association*.
Ad-hoc analysis and article writing.