Research outputs:

Deep Generative Models for Molecular Science
Research output: Research - peer-review › Journal article – Annual report year: 2018

Efficient computation for Bayesian comparison of two proportions
Research output: Research - peer-review › Journal article – Annual report year: 2018

Functional Connectivity using a Wishart Mixture Model
Research output: Research - peer-review › Article in proceedings – Annual report year: 2018

Machine learning-based screening of complex molecules for polymer solar cells
Research output: Research - peer-review › Journal article – Annual report year: 2018

Neural Message Passing with Edge Updates for Predicting Properties of Molecules and Materials
Research output: Research › Paper – Annual report year: 2018

Predictive assessment of models for dynamic functional connectivity
Research output: Research - peer-review › Journal article – Annual report year: 2017

Testing a Model of Destination Image Formation: Application of Nonparametric Bayesian Relational Modeling to Destination Image Analysis
Research output: Research - peer-review › Article in proceedings – Annual report year: 2018

Testing group differences in state transition structure of dynamic functional connectivity models
Research output: Research - peer-review › Article in proceedings – Annual report year: 2018

Understanding Mindsets Across Markets, Internationally: A Public-private Innovation Project for Developing a Tourist Data Analytic Platform
Research output: Research - peer-review › Article in proceedings – Annual report year: 2018

A pseudo-Voigt component model for high-resolution recovery of constituent spectra in Raman spectroscopy
Research output: Research - peer-review › Article in proceedings – Annual report year: 2017

Difference-of-Convex optimization for variational kl-corrected inference in dirichlet process mixtures
Research output: Research - peer-review › Article in proceedings – Annual report year: 2017
Examination of heterogeneous societies: Identifying subpopulations by contrasting cultures
Research output: Research - peer-review › Journal article – Annual report year: 2016

Infinite von Mises-Fisher Mixture Modeling of Whole Brain fMRI Data
Research output: Research - peer-review › Journal article – Annual report year: 2017

Modeling dynamic functional connectivity using a wishart mixture model
Research output: Research - peer-review › Article in proceedings – Annual report year: 2017

Scalable group level probabilistic sparse factor analysis
Research output: Research - peer-review › Article in proceedings – Annual report year: 2017

Whole-brain functional connectivity predicted by indirect structural connections
Research output: Research - peer-review › Article in proceedings – Annual report year: 2017

Bayesian latent feature modeling for modeling bipartite networks with overlapping groups
Research output: Research - peer-review › Article in proceedings – Annual report year: 2016

Completely random measures for modelling block-structured sparse networks
Research output: Research - peer-review › Article in proceedings – Annual report year: 2016

Surface-enhanced Raman spectroscopic study of DNA and 6-mercapto-1-hexanol interactions using large area mapping
Research output: Research - peer-review › Journal article – Annual report year: 2016

The influence of hyper-parameters in the infinite relational model
Research output: Research - peer-review › Article in proceedings – Annual report year: 2016

Nonparametric modeling of dynamic functional connectivity in fmri data
Research output: Research - peer-review › Article in proceedings – Annual report year: 2015

Numerical approximations for speeding up mcmc inference in the infinite relational model
Research output: Research - peer-review › Article in proceedings – Annual report year: 2015

Statistical analysis of large areas of Raman mapped DNA functionalized gold coated silicon nanopillar SERS substrates
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2015

Unsupervised segmentation of task activated regions in fmRI
Research output: Research - peer-review › Article in proceedings – Annual report year: 2015

Cross-categorization of legal concepts across boundaries of legal systems: in consideration of inferential links
Research output: Research - peer-review › Journal article – Annual report year: 2014

Community structure in resting state complex networks
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2014

Discovering hierarchical structure in normal relational data
Research output: Research - peer-review › Article in proceedings – Annual report year: 2014

Errata to "Bayesian community detection": [Neural computation, sept. 2012, vol. 24, no. 9:2434-2456]
Research output: Research - peer-review › Journal article – Annual report year: 2014
Interactive 3D audio: Enhancing awareness of details in immersive soundscapes?
Research output: Research - peer-review › Article in proceedings – Annual report year: 2012

Joint Modelling of Structural and Functional Brain Networks
Research output: Research - peer-review › Paper – Annual report year: 2012

Modelling dense relational data
Research output: Research - peer-review › Article in proceedings – Annual report year: 2012

Nonlinear impairment compensation using expectation maximization for dispersion managed and unmanaged PDM 16-QAM transmission
Research output: Research - peer-review › Journal article – Annual report year: 2012

Nonlinear Impairment Compensation Using Expectation Maximization for PDM 16-QAM Systems
Research output: Research - peer-review › Article in proceedings – Annual report year: 2012

Infinite multiple membership relational modeling for complex networks
Research output: Research - peer-review › Article in proceedings – Annual report year: 2011

Transformation invariant sparse coding
Research output: Research - peer-review › Article in proceedings – Annual report year: 2011

Unmixing of Hyperspectral Images using Bayesian Non-negative Matrix Factorization with Volume Prior
Research output: Research - peer-review › Journal article – Annual report year: 2010

Infinite Multiple Membership Relational Modeling for Complex Networks
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2010

Infinite Multiple Membership Relational Modeling for Complex Networks
Research output: Research - peer-review › Poster – Annual report year: 2010

Infinite non-negative matrix factorization
Research output: Research - peer-review › Article in proceedings – Annual report year: 2010

Reversible jump MCMC for Bayesian NMF
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2010

Single-channel source separation using non-negative matrix factorization
Research output: Research › Ph.D. thesis – Annual report year: 2009

Bayesian non-negative matrix factorization
Research output: Research - peer-review › Article in proceedings – Annual report year: 2008

Bayesian Nonnegative Matrix Factorization with Volume Prior for Unmixing of Hyperspectral Images
Research output: Research - peer-review › Article in proceedings – Annual report year: 2009

Non-negative matrix factorization with Gaussian process priors
Research output: Research - peer-review › Journal article – Annual report year: 2008

Reduction of Non-stationary Noise using a Non-negative Latent Variable Decomposition
Research output: Research - peer-review › Article in proceedings – Annual report year: 2008
Structured non-negative matrix factorization with sparsity patterns
Research output: Research › peer-review › Article in proceedings – Annual report year: 2008

Linear Regression on Sparse Features for Single-Channel Speech Separation
Research output: Research › peer-review › Article in proceedings – Annual report year: 2007

Single-Channel Speech Separation using Sparse Non-Negative Matrix Factorization
Research output: Research › peer-review › Article in proceedings – Annual report year: 2007

Wind Noise Reduction using Non-negative Sparse Coding
Research output: Research › peer-review › Article in proceedings – Annual report year: 2007

Wind Noise Reduction Using Non-negative Sparse Coding
Research output: Research › Sound/Visual production (digital) – Annual report year: 2007

Nonnegative Matrix Factor 2-D Deconvolution for Blind Single Channel Source Separation
Research output: Research › peer-review › Article in proceedings – Annual report year: 2006

Sparse Non-negative Matrix Factor 2-D Deconvolution
Research output: Research › peer-review › Report – Annual report year: 2006

Sparse Non-negative Matrix Factor 2-D Deconvolution for Automatic Transcription of Polyphonic Music
Research output: Research › peer-review › Report – Annual report year: 2006

Sparse Non-negative Tensor 2D Deconvolution (SNTF2D) for multi channel time-frequency analysis
Research output: Research › peer-review › Report – Annual report year: 2006

Projects:

Flexible Densities for Deep Generative Models
Project: PhD

Neural Abstract Machines and Program Induction
Project: PhD

Active Deep Learning for Nano Sensor Systems
Project: PhD

A Bayesian Approach to Neural Networks
Project: PhD

Modeling Temporal Dynamics in Functional Brain Connectivity
Project: PhD

Structured Approximate Bayesian Inference
Project: PhD

Bayesian Modelling of Functional Whole Brain Connectivity
Project: PhD
Active Bayesian Sensing  
Project: PhD

Large Scale Computing for the Modelling of Whole Brain Connectivity  
Project: PhD

Modeling Structural Brain Connectivity  
Project: PhD

Signal separation using independent component analysis with explicit source modelling  
Project: PhD

Personalized Music Organization Systems  
Project: PhD

Generative temporal modeling of neuroimaging - decomposition and nonparametric testing  
Project: PhD

Modelling the structure of complex networks  
Project: PhD