CyberValley

Accepted papers at NeurIPS 2020

Max Planck Institute for Intelligent Systems

1. Barking up the right tree: an approach to search over molecule synthesis DAGs
John Bradshaw (University of Cambridge/MPI IS Tübingen) · Brooks Paige (University College London) · Matt Kusner (University College London) · Marwin Segler (BenevolentAI) · José Miguel Hernández-Lobato (University of Cambridge)

2. MATE: Plugging in Model Awareness to Task Embedding for Meta Learning
Xiaohan Chen (University of Texas at Austin) · Zhangyang Wang (University of Texas at Austin) · Siyu Tang (ETH Zurich) · Krikamol Muandet (Max Planck Institute for Intelligent Systems)

3. Relative gradient optimization of the Jacobian term in unsupervised deep learning
Luigi Gresele (MPI for Intelligent Systems, Tübingen) · Giancarlo Fissore (Inria) · Adrián Javaloy (Saarland University) · Bernhard Schölkopf (MPI for Intelligent Systems) · Aapo Hyvarinen (University of Helsinki)

4. Stochastic Stein Discrepancies
Jackson Gorham (Stanford University) · Anant Raj (Max Planck Institute for Intelligent Systems) · Lester Mackey (Microsoft Research)

5. Algorithmic recourse under imperfect causal knowledge: a probabilistic approach
Amir-Hossein Karimi (UWaterloo) · Julius von Kügelgen (MPI for Intelligent Systems, Tübingen & University of Cambridge) · Bernhard Schölkopf (MPI for Intelligent Systems) · Isabel Valera (Max Planck Institute for Intelligent Systems)

6. Self-Paced Deep Reinforcement Learning
Pascal Klink (TU Darmstadt) · Carlo D'Eramo (TU Darmstadt) · Jan Peters (TU Darmstadt & MPI Intelligent Systems) · Joni Pajarinen (TU Darmstadt)

7. Learning Kernel Tests Without Data Splitting
Jonas Kübler (MPI for Intelligent Systems, Tübingen) · Wittawat Jitkrittum (Max Planck Institute for Intelligent Systems) · Bernhard Schölkopf (MPI for Intelligent Systems) · Krikamol Muandet (Max Planck Institute for Intelligent Systems)

8. Object-Centric Learning with Slot Attention
Francesco Locatello (ETH Zürich - MPI Tübingen) · Dirk Weissenborn (Google) · Thomas Unterthiner (Google Research, Brain Team) · Aravindh Mahendran (Google) · Georg Heigold (Google) · Jakob Uszkoreit (Google, Inc.) · Alexey Dosovitskiy (Google Research) · Thomas Kipf (Google Research)

9. Causal analysis of Covid-19 Spread in Germany
Atalanti Mastakouri (Max Planck Institute for Intelligent Systems) · Bernhard Schölkopf (MPI for Intelligent Systems)

10. Dual Instrumental Variable Regression
Krikamol Muandet (Max Planck Institute for Intelligent Systems) · Arash Mehrjou (Max Planck Institute) · Si Kai Lee (Chicago Booth School of Business) · Anant Raj (Max Planck Institute for Intelligent Systems)

11. A Measure-Theoretic Approach to Kernel Conditional Mean Embeddings
Junhyung Park (MPI for Intelligent Systems, Tübingen) · Krikamol Muandet (Max Planck Institute for Intelligent Systems)

12. Near-Optimal Comparison Based Clustering
Michaël Perrot (Max Planck Institute for Intelligent Systems) · Pascal Esser (Technical University of Munich) · Debarghya Ghoshdastidar (Technical University Munich)

13. Modeling Shared responses in Neuroimaging Studies through MultiView ICA
Hugo Richard (INRIA) · Luigi Gresele (MPI for Intelligent Systems, Tübingen) · Aapo Hyvarinen (University of Helsinki) · Bertrand Thirion (INRIA) · Alexandre Gramfort (INRIA) · Pierre Ablin (INRIA)

14. GRAF: Generative Radiance Fields for 3D-Aware Image Synthesis
Katja Schwarz (MPI Tuebingen) · Yiyi Liao (MPI Tuebingen) · Michael Niemeyer (Max Planck for Intelligent Systems) · Andreas Geiger (MPI-IS and University of Tuebingen)

15. Sample-Efficient Optimization in the Latent Space of Deep Generative Models via Weighted Retraining
Austin Tripp (University of Cambridge) · Erik Daxberger (University of Cambridge) · José Miguel Hernández-Lobato (University of Cambridge)

University of Tübingen

1. Provable Worst Case Guarantees for the Detection of Out-of-distribution Data
Julian Bitterwolf (University of Tübingen) · Alexander Meinke (University of Tübingen) · Matthias Hein (University of Tübingen)

2. Factorized Neural Processes for Neural Processes: K-Shot Prediction of Neural Responses
Ronald (James) Cotton (Shirley Ryan AbilityLab) · Fabian Sinz (University Tübingen) · Andreas Tolias (Baylor College of Medicine)

3. Beyond accuracy: quantifying trial-by-trial behaviour of CNNs and humans by measuring error consistency
Robert Geirhos (University of Tübingen) · Kristof Meding (University of Tübingen & MPI for Intelligent Systems) · Felix A. Wichmann (University of Tübingen)

4. Parabolic Approximation Line Search for DNNs
Maximus Mutschler (University of Tübingen) · Andreas Zell (University of Tuebingen)

5. Improving robustness against common corruptions by covariate shift adaptation
Steffen Schneider (University of Tübingen) · Evgenia Rusak (University of Tuebingen) · Luisa Eck (LMU Munich) · Oliver Bringmann (University of Tübingen) · Wieland Brendel (AG Bethge, University of Tübingen) · Matthias Bethge (University of Tübingen)

6. System Identification with Biophysical Constraints: A Circuit Model of the Inner Retina
Cornelius Schröder (University of Tübingen) · David Klindt (University of Tübingen) · Sarah Strauss

(University of Tübingen) · Katrin Franke (University of Tübingen) · Matthias Bethge (University of Tübingen) · Thomas Euler (University of Tübingen) · Philipp Berens (University of Tübingen)

7. On Adaptive Attacks to Adversarial Example Defenses
Florian Tramer (Stanford University) · Nicholas Carlini (Google) · Wieland Brendel (University of Tübingen) · Aleksander Madry (MIT)

8. Probabilistic Linear Solvers for Machine Learning
Jonathan Wenger (University of Tübingen) · Philipp Hennig (University of Tübingen and MPI for Intelligent Systems Tübingen)

9. Attribute Prototype Network for Zero-Shot Learning
Wenjia Xu (University of Chinese Academy of Sciences) · Yongqin Xian (Max Planck Institute Informatics) · Jiuniu Wang (City University of Hong Kong) · Bernt Schiele (Max Planck Institute for Informatics) · Zeynep Akata (University of Tübingen)

University of Stuttgart:

1. Understanding Anomaly Detection with Deep Invertible Networks through Hierarchies of Distributions and Features
Robin T Schirrmeister (University Medical Center Freiburg) · Yuxuan Zhou (Stuttgart University) · Tonio Ball (Albert-Ludwigs-University) · Dan Zhang (Bosch Center for Artificial Intelligence)

2. Improving Natural Language Processing Tasks with Human Gaze-Guided Neural Attention
Ekta Sood (University of Stuttgart) · Simon Tannert (University of Stuttgart) · Philipp Mueller (VIS, University of Stuttgart) · Andreas Bulling (University of Stuttgart)

Max Planck Institute for Biological Cybernetics

1. A Local Temporal Difference Code for Distributional Reinforcement Learning
Pablo Tano (University of Geneva) · Peter Dayan (Max Planck Institute for Biological Cybernetics) · Alexandre Pouget (University of Geneva)

Bosch Center for Artificial Intelligence:

1. Graph Random Neural Networks for Semi-Supervised Learning on Graphs
Wenzheng Feng (Tsinghua University) · Jie Zhang (Webank Co.,Ltd) · Yuxiao Dong (Microsoft) · Yu Han (Tsinghua University) · Huanbo Luan (Tsinghua University) · Qian Xu (WeBank) · Qiang Yang (WeBank and HKUST) · Evgeny Kharlamov (Bosch Center for Artificial Intelligence) · Jie Tang (Tsinghua University)

2. SE(3)-Transformers: 3D Roto-Translation Equivariant Attention Networks
Fabian Fuchs (University of Oxford) · Daniel Worrall (University of Amsterdam) · Volker Fischer (Robert Bosch GmbH, Bosch Center for Artificial Intelligence) · Max Welling (University of Amsterdam / Qualcomm AI Research)

3. High-Dimensional Bayesian Optimization via Nested Riemannian Manifolds
Noémie Jaquier (Karlsruhe Institute of Technology) · Leonel Rozo (Bosch Center for Artificial Intelligence)

4. Beyond the Mean-Field: Structured Deep Gaussian Processes Improve the Predictive Uncertainties

Jakob Lindinger (Bosch Center for Artificial Intelligence) · David Reeb (Bosch Center for Artificial Intelligence (BCAI) · Christoph Lippert (Hasso Plattner Institute for Digital Engineering, Universität Potsdam) · Barbara Rakitsch (Bosch Center for Artificial Intelligence)