Tue Dec 4th

Machine Learning Meets Public Policy: What to Expect and How to Cope

Tue Dec 4th 08:30 – 09:20 AM @ Rooms 220 CDE
Invited Talk – In Tue Invited Talk 1
Edward W Felten

Test of Time Award

Tue Dec 4th 09:20 – 09:40 AM @
Talk – In Test of Time

Coffee Break

Tue Dec 4th 09:40 – 10:05 AM @
Break –

In Tue Track 1 – Session 1

Tue Dec 4th 10:05 – 10:20 AM @ Room 220 CD – Tue Dec 4th 10:30 – 10:45 AM @ Room 220 CD

On Neuronal Capacity

Tue Dec 4th 10:05 – 10:20 AM @ Room 220 CD
Oral – In Tue Track 1 – Session 1
Pierre Baldi · Roman Vershynin
Poster Tue Dec 4th 10:45 AM – 12:45 PM @ Room 517 AB #142

Learning Overparameterized Neural Networks via Stochastic Gradient Descent on Structured Data

Tue Dec 4th 10:20 – 10:25 AM @ Room 220 CD
Spotlight – In Tue Track 1 – Session 1
Yuanzhi Li · Yingyu Liang
Poster Tue Dec 4th 10:45 AM – 12:45 PM @ Room 517 AB #143

Size-Noise Tradeoffs in Generative Networks

Tue Dec 4th 10:25 – 10:30 AM @ Room 220 CD
Spotlight – In Tue Track 1 – Session 1
Bolton Bailey · Matus Telgarsky
Poster Tue Dec 4th 10:45 AM – 12:45 PM @ Room 517 AB #141

Dendritic cortical microcircuits approximate the backpropagation algorithm

Tue Dec 4th 10:30 – 10:45 AM @ Room 220 CD
Oral – In Tue Track 1 – Session 1
Jo?o Sacramento · Rui Ponte Costa · Yoshua Bengio · Walter Senn
Poster Tue Dec 4th 10:45 AM – 12:45 PM @ Room 517 AB #139

In Tue Track 2 – Session 1

Tue Dec 4th 10:05 – 10:20 AM @ Room 220 E – Tue Dec 4th 10:30 – 10:45 AM @ Room 220 E

On the Dimensionality of Word Embedding

Tue Dec 4th 10:05 – 10:20 AM @ Room 220 E
Oral – In Tue Track 2 – Session 1
Zi Yin · Yuanyuan Shen
Poster Tue Dec 4th 10:45 AM – 12:45 PM @ Room 517 AB #101

Unsupervised Cross-Modal Alignment of Speech and Text Embedding Spaces

Tue Dec 4th 10:20 – 10:25 AM @ Room 220 E
Spotlight – In Tue Track 2 – Session 1
Yu-An Chung · Wei-Hung Weng · Schrasing Tong · James Glass
Poster Tue Dec 4th 10:45 AM – 12:45 PM @ Room 517 AB #156

Diffusion Maps for Textual Network Embedding

Tue Dec 4th 10:25 – 10:30 AM @ Room 220 E
Spotlight – In Tue Track 2 – Session 1
Xinyuan Zhang · Yitong Li · Dinghan Shen · Lawrence Carin
Poster Tue Dec 4th 10:45 AM – 12:45 PM @ Room 517 AB #152

A Retrieve-and-Edit Framework for Predicting Structured Outputs

Tue Dec 4th 10:30 – 10:45 AM @ Room 220 E
Oral – In Tue Track 2 – Session 1
Tatsunori Hashimoto · Kelvin Guu · Yonatan Oren · Percy Liang
Poster Tue Dec 4th 10:45 AM – 12:45 PM @ Room 517 AB #154

In Tue Track 3 – Session 1

Tue Dec 4th 10:05 – 10:20 AM @ Room 517 CD – Tue Dec 4th 10:30 – 10:45 AM @ Room 517 CD

Phase Retrieval Under a Generative Prior

Tue Dec 4th 10:05 – 10:20 AM @ Room 517 CD
Oral – In Tue Track 3 – Session 1
Paul Hand · Oscar Leong · Vlad Voroninski
Poster Tue Dec 4th 10:45 AM – 12:45 PM @ Room 517 AB #162

Global Geometry of Multichannel Sparse Blind Deconvolution on the Sphere

Tue Dec 4th 10:20 – 10:25 AM @ Room 517 CD
Spotlight – In Tue Track 3 – Session 1
Yanjun Li · Yoram Bresler
Poster Tue Dec 4th 10:45 AM – 12:45 PM @ Room 517 AB #161

Theoretical Linear Convergence of Unfolded ISTA and Its Practical Weights and Thresholds

Tue Dec 4th 10:25 – 10:30 AM @ Room 517 CD
Spotlight – In Tue Track 3 – Session 1
Xiaohan Chen · Jialin Liu · Zhangyang Wang · Wotao Yin
Poster Tue Dec 4th 10:45 AM – 12:45 PM @ Room 517 AB #163

Spectral Filtering for General Linear Dynamical Systems

Tue Dec 4th 10:30 – 10:45 AM @ Room 517 CD
Oral – In Tue Track 3 – Session 1
Elad Hazan · HOLDEN LEE · Karan Singh · Cyril Zhang · Yi Zhang
Poster Tue Dec 4th 10:45 AM – 12:45 PM @ Room 517 AB #167

In Tue Demonstrations

Tue Dec 4th 10:45 AM – 07:30 PM @ Room 510 ABCD #D9 – Tue Dec 4th 10:45 AM – 07:30 PM @ Room 510 ABCD #D5

A machine learning environment to determine novel malaria policies

Tue Dec 4th 10:45 AM – 07:30 PM @ Room 510 ABCD #D9
Demonstration – In Tue Demonstrations
Oliver Bent · Sekou L Remy · Nelson Bore

Game for Detecting Backdoor Attacks on Deep Neural Networks using Activation Clustering

Tue Dec 4th 10:45 AM – 07:30 PM @ Room 510 ABCD #D4
Demonstration – In Tue Demonstrations
Casey Dugan · Werner Geyer · Aabhas Sharma · Ingrid Lange · Dustin Ramsey Torres · Bryant Chen · Nathalie Baracaldo Angel · Heiko Ludwig

TensorFlow Dance - Learning to Dance via Machine Learning

Tue Dec 4th 10:45 AM – 07:30 PM @ Room 510
Demonstration – In Tue Demonstrations
Yaz Santissi · Chintan Trivedi

A Hands-free Natural User Interface (NUI) for AR/VR Head-Mounted Displays Exploiting Wearer's Facial Gestures

Tue Dec 4th 10:45 AM – 07:30 PM @ Room 510 ABCD #D7
Demonstration – In Tue Demonstrations
Jaekwang Cha · Shiho Kim · Jinhyuk Kim

TextWorld: A Learning Environment for Text-based Games

Tue Dec 4th 10:45 AM – 07:30 PM @ Room 510 ABCD #D10
Demonstration – In Tue Demonstrations
Marc-Alexandre C?t? · Wendy Tay · Eric Yuan

Deep Neural Networks Running Onboard Anki's Robot, Vector

Tue Dec 4th 10:45 AM – 07:30 PM @ Room 510 ABCD #D1
Demonstration – In Tue Demonstrations
Lorenzo Riano · Andrew Stein · Mark Palatucci

Reproducing Machine Learning Research on Binder

Tue Dec 4th 10:45 AM – 07:30 PM @ Room 510
Demonstration – In Tue Demonstrations
Jessica Forde · Tim Head · Chris Holdgraf · M Pacer · F?lix-Antoine
Fortin · Fernando Perez

A model-agnostic web interface for interactive music
composition by inpainting

Tue Dec 4th 10:45 AM – 07:30 PM @ Room 510 ABCD #D8
Demonstration – In Tue Demonstrations
Ga?tan Hadjeres · Th?is Bazin · Ashis Pati

Ruuh: A Deep Learning Based Conversational Social Agent

Tue Dec 4th 10:45 AM – 07:30 PM @ Room 510 ABCD #D3
Demonstration – In Tue Demonstrations
Puneet Agrawal · Manoj Kumar Chinnakotla · Sonam Damani
· Meghana Joshi · Kedhar Nath Narahari · Khyatti Gupta · Nitya
Raviprakash · Umang Gupta · Ankush Chatterjee · Abhishek Mathur
· Sneha Magapu

Deep learning to improve quality control in pharmaceutical
manufacturing

Tue Dec 4th 10:45 AM – 07:30 PM @ Room 510 ABCD #D5
Demonstration – In Tue Demonstrations
Michael Sass Hansen · Sebastian Brandes Kraaijenzank

In Tue Poster Session A

Modelling sparsity, heterogeneity, reciprocity and community
structure in temporal interaction data

Tue Dec 4th 10:45 AM – 12:45 PM @ Room 210 #1
Poster – In Tue Poster Session A
Xenia Miscouridou · Francois Caron · Yee Whye Teh

The Lingering of Gradients: How to Reuse Gradients Over Time

Tue Dec 4th 10:45 AM – 12:45 PM @ Room 210 #2
Poster – In Tue Poster Session A
Zeyuan Allen-Zhu · David Simchi-Levi · Xinshang Wang

Quadratic Decomposable Submodular Function Minimization

Tue Dec 4th 10:45 AM – 12:45 PM @ Room 210 #3
Poster – In Tue Poster Session A
Pan Li · Niao He · Olgica Milenkovic

On the Global Convergence of Gradient Descent for
Over-parameterized Models using Optimal Transport

Tue Dec 4th 10:45 AM – 12:45 PM @ Room 210 #4
Poster – In Tue Poster Session A
L?na?c Chizat · Francis Bach

Leveraging the Exact Likelihood of Deep Latent Variable Models

Tue Dec 4th 10:45 AM – 12:45 PM @ Room 210 #5
Poster – In Tue Poster Session A
Pierre-Alexandre Mattei · Jes Frellsen

DVAE\#: Discrete Variational Autoencoders with Relaxed
Boltzmann Priors

Tue Dec 4th 10:45 AM – 12:45 PM @ Room 210 #6
Poster – In Tue Poster Session A
Arash Vahdat · Evgeny Andriyash · William Macready

Amortized Inference Regularization

Tue Dec 4th 10:45 AM – 12:45 PM @ Room 210 #7
Poster – In Tue Poster Session A
Rui Shu · Hung Bui · Shengjia Zhao · Mykel J Kochenderfer · Stefano Ermon

GumBolt: Extending Gumbel trick to Boltzmann priors

Tue Dec 4th 10:45 AM – 12:45 PM @ Room 210 #8
Poster – In Tue Poster Session A
Amir H Khoshaman · Mohammad Amin

Constrained Generation of Semantically Valid Graphs via
Regularizing Variational Autoencoders

Tue Dec 4th 10:45 AM – 12:45 PM @ Room 210 #9
Poster – In Tue Poster Session A
Tengfei Ma · Jie Chen · Cao Xiao

Invertibility of Convolutional Generative Networks from
Partial Measurements

Tue Dec 4th 10:45 AM – 12:45 PM @ Room 210 #10
Poster – In Tue Poster Session A
Fangchang Ma · Ulas Ayaz · Sertac Karaman

Glow: Generative Flow with Invertible 1x1 Convolutions

Tue Dec 4th 10:45 AM – 12:45 PM @ Room 210 #11
Poster – In Tue Poster Session A
Durk Kingma · Prafulla Dhariwal

Multimodal Generative Models for Scalable Weakly-Supervised
Learning

Tue Dec 4th 10:45 AM – 12:45 PM @ Room 210 #12
Poster – In Tue Poster Session A
Mike Wu · Noah Goodman

IntroVAE: Introspective Variational Autoencoders for
Photographic Image Synthesis

Tue Dec 4th 10:45 AM – 12:45 PM @ Room 210 #13
Poster – In Tue Poster Session A
Huaibo Huang · zhihang li · Ran He · Zhenan Sun · Tieniu Tan

Towards Text Generation with Adversarially Learned Neural
Outlines

Tue Dec 4th 10:45 AM – 12:45 PM @ Room 210 #14
Poster – In Tue Poster Session A
Sandeep Subramanian · Sai Rajeswar Mudumba · Alessandro Sordoni · Adam Trischler · Aaron Courville · Chris Pal

Unsupervised Image-to-Image Translation Using Domain-Specific
Variational Information Bound

Tue Dec 4th 10:45 AM – 12:45 PM @ Room 210 #15
Poster – In Tue Poster Session A
Hadi Kazemi · Sobhan Soleymani · Fariborz Taherkhani · Seyed
Iranmanesh · Nasser Nasrabadi

Adversarial Scene Editing: Automatic Object Removal from Weak
Supervision

Tue Dec 4th 10:45 AM – 12:45 PM @ Room 210 #16
Poster – In Tue Poster Session A
Rakshith R Shetty · Mario Fritz · Bernt Schiele

Generalizing Point Embeddings using the Wasserstein Space of
Elliptical Distributions

Tue Dec 4th 10:45 AM – 12:45 PM @ Room 210 #17
Poster – In Tue Poster Session A
Boris Muzellec · Marco Cuturi

Banach Wasserstein GAN

Tue Dec 4th 10:45 AM – 12:45 PM @ Room 210 #18
Poster – In Tue Poster Session A
Jonas Adler · Sebastian Lunz

A Convex Duality Framework for GANs

Tue Dec 4th 10:45 AM – 12:45 PM @ Room 210 #19
Poster – In Tue Poster Session A
Farzan Farnia · David Tse

On the Convergence and Robustness of Training GANs with Regularized Optimal Transport

Tue Dec 4th 10:45 AM – 12:45 PM @ Room 210 #20
Poster – In Tue Poster Session A
Maziar Sanjabi · Jimmy Ba · Meisam Razaviyayn · Jason Lee

On gradient regularizers for MMD GANs

Tue Dec 4th 10:45 AM – 12:45 PM @ Room 210 #21
Poster – In Tue Poster Session A
Michael Arbel · Dougal J Sutherland · Miko?aj Bi?kowski · Arthur Gretton

PacGAN: The power of two samples in generative adversarial networks

Tue Dec 4th 10:45 AM – 12:45 PM @ Room 210 #22
Poster – In Tue Poster Session A
Zinan Lin · Ashish Khetan · Giulia Fanti · Sewoong Oh

Are GANs Created Equal? A Large-Scale Study

Tue Dec 4th 10:45 AM – 12:45 PM @ Room 210 #23
Poster – In Tue Poster Session A
Mario Lucic · Karol Kurach · Marcin Michalski · Sylvain Gelly · Olivier Bousquet

Disconnected Manifold Learning for Generative Adversarial Networks

Tue Dec 4th 10:45 AM – 12:45 PM @ Room 210 #24
Poster – In Tue Poster Session A
Mahyar Khayatkhoei · Maneesh K. Singh · Ahmed Elgammal

Hessian-based Analysis of Large Batch Training and Robustness to Adversaries

Tue Dec 4th 10:45 AM – 12:45 PM @ Room 210 #25
Poster – In Tue Poster Session A
Zhewei Yao · Amir Gholami · Qi Lei · Kurt Keutzer · Michael W Mahoney

Fast and Effective Robustness Certification

Tue Dec 4th 10:45 AM – 12:45 PM @ Room 210 #26
Poster – In Tue Poster Session A
Gagandeep Singh · Timon Gehr · Matthew Mirman · Markus P?schel · Martin Vechev

Graphical Generative Adversarial Networks

Tue Dec 4th 10:45 AM – 12:45 PM @ Room 210 #27
Poster – In Tue Poster Session A
Chongxuan LI · Max Welling · Jun Zhu · Bo Zhang

Deep Defense: Training DNNs with Improved Adversarial Robustness

Tue Dec 4th 10:45 AM – 12:45 PM @ Room 210 #28
Poster – In Tue Poster Session A
Ziang Yan · Yiwen Guo · Changshui Zhang

Learning to Repair Software Vulnerabilities with Generative Adversarial Networks

Tue Dec 4th 10:45 AM – 12:45 PM @ Room 210 #29
Poster – In Tue Poster Session A
Jacob Harer · Onur Ozdemir · Tomo Lazovich · Christopher Reale · Rebecca Russell · Louis Kim · peter chin

Memory Replay GANs: Learning to Generate New Categories without Forgetting

Tue Dec 4th 10:45 AM – 12:45 PM @ Room 210 #30
Poster – In Tue Poster Session A
Chenshen Wu · Luis Herranz · Xialei Liu · yaxing wang · Joost van de Weijer · Bogdan Raducanu

Unsupervised Attention-guided Image-to-Image Translation

Tue Dec 4th 10:45 AM – 12:45 PM @ Room 210 #31
Poster – In Tue Poster Session A
Youssef Alami Mejjati · Christian Richardt · James Tompkin · Darren Cosker · Kwang In Kim

Conditional Adversarial Domain Adaptation

Tue Dec 4th 10:45 AM – 12:45 PM @ Room 210 #32
Poster – In Tue Poster Session A
Mingsheng Long · ZHANGJIE CAO · Jianmin Wang · Michael Jordan

Video-to-Video Synthesis

Tue Dec 4th 10:45 AM – 12:45 PM @ Room 210 #33
Poster – In Tue Poster Session A
Ting-Chun Wang · Ming-Yu Liu · Jun-Yan Zhu · Nikolai Yakovenko · Andrew Tao · Jan Kautz · Bryan Catanzaro

Generalized Zero-Shot Learning with Deep Calibration Network

Tue Dec 4th 10:45 AM – 12:45 PM @ Room 210 #34
Poster – In Tue Poster Session A
Shichen Liu · Mingsheng Long · Jianmin Wang · Michael Jordan

Low-shot Learning via Covariance-Preserving Adversarial Augmentation Networks

Tue Dec 4th 10:45 AM – 12:45 PM @ Room 210 #35
Poster – In Tue Poster Session A
Hang Gao · Zheng Shou · Alireza Zareian · Hanwang Zhang · Shih-Fu Chang

Trading robust representations for sample complexity through self-supervised visual experience

Tue Dec 4th 10:45 AM – 12:45 PM @ Room 210 #36
Poster – In Tue Poster Session A
Andrea Tacchetti · Stephen Voinea · Georgios Evangelopoulos

TADAM: Task dependent adaptive metric for improved few-shot learning

Tue Dec 4th 10:45 AM – 12:45 PM @ Room 210 #37
Poster – In Tue Poster Session A
Boris Oreshkin · Pau Rodr?guez L?pez · Alexandre Lacoste

FishNet: A Versatile Backbone for Image, Region, and Pixel Level Prediction

Tue Dec 4th 10:45 AM – 12:45 PM @ Room 210 #38
Poster – In Tue Poster Session A
Shuyang Sun · Jiangmiao Pang · Jianping Shi · Shuai Yi · Wanli Ouyang

Batch-Instance Normalization for Adaptively Style-Invariant Neural Networks

Tue Dec 4th 10:45 AM – 12:45 PM @ Room 210 #39
Poster – In Tue Poster Session A
Hyeonseob Nam · Hyo-Eun Kim

A^2-Nets: Double Attention Networks

Tue Dec 4th 10:45 AM – 12:45 PM @ Room 210 #40
Poster – In Tue Poster Session A
Yunpeng Chen · Yannis Kalantidis · Jianshu Li · Shuicheng Yan · Jiashi Feng

Pelee: A Real-Time Object Detection System on Mobile Devices

Tue Dec 4th 10:45 AM – 12:45 PM @ Room 210 #41
Poster – In Tue Poster Session A
Jun Wang · Tanner Bohn · Charles Ling

PointCNN: Convolution On X-Transformed Points

Tue Dec 4th 10:45 AM – 12:45 PM @ Room 210 #42
Poster – In Tue Poster Session A
Yangyan Li · Rui Bu · Mingchao Sun · Wei Wu · Xinhan Di · Bao-quan Chen

Deep Neural Networks with Box Convolutions

Tue Dec 4th 10:45 AM – 12:45 PM @ Room 210 #43
Poster – In Tue Poster Session A
Egor Burkov · Victor Lempitsky

An intriguing failing of convolutional neural networks and the CoordConv solution

Tue Dec 4th 10:45 AM – 12:45 PM @ Room 210 #44
Poster – In Tue Poster Session A
Rosanne Liu · Joel Lehman · Piero Molino · Felipe Petroski Such · Eric Frank · Alex Sergeev · Jason Yosinski

3D Steerable CNNs: Learning Rotationally Equivariant Features in Volumetric Data

Tue Dec 4th 10:45 AM – 12:45 PM @ Room 210 #45
Poster – In Tue Poster Session A
Maurice Weiler · Wouter Boomsma · Mario Geiger · Max Welling · Taco Cohen

Moonshine: Distilling with Cheap Convolutions

Tue Dec 4th 10:45 AM – 12:45 PM @ Room 210 #46
Poster – In Tue Poster Session A
Elliot J. Crowley · Gavin Gray · Amos Storkey

Kalman Normalization: Normalizing Internal Representations Across Network Layers

Tue Dec 4th 10:45 AM – 12:45 PM @ Room 210 #47
Poster – In Tue Poster Session A
Guangrun Wang · jiefeng peng · Ping Luo · Xinjiang Wang · Liang Lin

SplineNets: Continuous Neural Decision Graphs

Tue Dec 4th 10:45 AM – 12:45 PM @ Room 210 #48
Poster – In Tue Poster Session A
Cem Keskin · Shahram Izadi

CapProNet: Deep Feature Learning via Orthogonal Projections onto Capsule Subspaces

Tue Dec 4th 10:45 AM – 12:45 PM @ Room 210 #49
Poster – In Tue Poster Session A
Liheng Zhang · Marzieh Edraki · Guo-Jun Qi

Which Neural Net Architectures Give Rise to Exploding and Vanishing Gradients?

Tue Dec 4th 10:45 AM – 12:45 PM @ Room 210 #50
Poster – In Tue Poster Session A
Boris Hanin

Exact natural gradient in deep linear networks and its application to the nonlinear case

Tue Dec 4th 10:45 AM – 12:45 PM @ Room 210 #51
Poster – In Tue Poster Session A
Alberto Bernacchia · Mate Lengyel · Guillaume Hennequin

Fast Approximate Natural Gradient Descent in a Kronecker Factored Eigenbasis

Tue Dec 4th 10:45 AM – 12:45 PM @ Room 210 #52
Poster – In Tue Poster Session A
Thomas George · C?sar Laurent · Xavier Bouthillier · Nicolas Ballas · Pascal Vincent

Post: Device Placement with Cross-Entropy Minimization and Proximal Policy Optimization

Tue Dec 4th 10:45 AM – 12:45 PM @ Room 210 #53
Poster – In Tue Poster Session A
Yuanxiang Gao · Li Chen · Baochun Li

Paraphrasing Complex Network: Network Compression via Factor Transfer

Tue Dec 4th 10:45 AM – 12:45 PM @ Room 210 #54
Poster – In Tue Poster Session A
Jangho Kim · Seonguk Park · Nojun Kwak

Learning Compressed Transforms with Low Displacement Rank

Tue Dec 4th 10:45 AM – 12:45 PM @ Room 210 #55
Poster – In Tue Poster Session A
Anna Thomas · Albert Gu · Tri Dao · Atri Rudra · Christopher R?

Knowledge Distillation by On-the-Fly Native Ensemble

Tue Dec 4th 10:45 AM – 12:45 PM @ Room 210 #56
Poster – In Tue Poster Session A
xu lan · Xiatian Zhu · Shaogang Gong

Scalable methods for 8-bit training of neural networks

Tue Dec 4th 10:45 AM – 12:45 PM @ Room 210 #57
Poster – In Tue Poster Session A
Ron Banner · Itay Hubara · Elad Hoffer · Daniel Soudry

Training Deep Models Faster with Robust, Approximate Importance Sampling

Tue Dec 4th 10:45 AM – 12:45 PM @ Room 210 #58
Poster – In Tue Poster Session A
Tyler Johnson · Carlos Guestrin

Collaborative Learning for Deep Neural Networks

Tue Dec 4th 10:45 AM – 12:45 PM @ Room 210 #59
Poster – In Tue Poster Session A
Guocong Song · Wei Chai

A Linear Speedup Analysis of Distributed Deep Learning with Sparse and Quantized Communication

Tue Dec 4th 10:45 AM – 12:45 PM @ Room 210 #60
Poster – In Tue Poster Session A
Peng Jiang · Gagan Agrawal

Bayesian Distributed Stochastic Gradient Descent

Tue Dec 4th 10:45 AM – 12:45 PM @ Room 210 #61
Poster – In Tue Poster Session A
Michael Teng · Frank Wood

Regularizing by the Variance of the Activations' Sample-Variances

Tue Dec 4th 10:45 AM – 12:45 PM @ Room 210 #62
Poster – In Tue Poster Session A
Etai Littwin · Lior Wolf

BML: A High-performance, Low-cost Gradient Synchronization Algorithm for DML Training

Tue Dec 4th 10:45 AM – 12:45 PM @ Room 210 #63
Poster – In Tue Poster Session A
Songtao Wang · Dan Li · Yang Cheng · Jinkun Geng · Yanshu Wang · Shuai Wang · Shu-Tao Xia · Jianping Wu

L4: Practical loss-based stepsize adaptation for deep learning

Tue Dec 4th 10:45 AM – 12:45 PM @ Room 210 #64
Poster – In Tue Poster Session A
Michal Rolinek · Georg Martius

Synaptic Strength For Convolutional Neural Network

Tue Dec 4th 10:45 AM – 12:45 PM @ Room 210 #65
Poster – In Tue Poster Session A
CHEN LIN · Zhao Zhong · Wu Wei · Junjie Yan

ChannelNets: Compact and Efficient Convolutional Neural Networks via Channel-Wise Convolutions

Tue Dec 4th 10:45 AM – 12:45 PM @ Room 210 #66
Poster – In Tue Poster Session A
Hongyang Gao · Zhengyang Wang · Shuiwang Ji

Frequency-Domain Dynamic Pruning for Convolutional Neural Networks

Tue Dec 4th 10:45 AM – 12:45 PM @ Room 210 #67
Poster – In Tue Poster Session A
Zhenhua Liu · Jizheng Xu · Xiulian Peng · Ruiqin Xiong

TETRIS: TilE-matching the TRemendous Irregular Sparsity

Tue Dec 4th 10:45 AM – 12:45 PM @ Room 210 #68
Poster – In Tue Poster Session A
Yu Ji · Ling Liang · Lei Deng · Youyang Zhang · Youhui Zhang · Yuan Xie

Heterogeneous Bitwidth Binarization in Convolutional Neural Networks

Tue Dec 4th 10:45 AM – 12:45 PM @ Room 210 #69
Poster – In Tue Poster Session A
Joshua Fromm · Shwetak Patel · Matthai Philipose

HitNet: Hybrid Ternary Recurrent Neural Network

Tue Dec 4th 10:45 AM – 12:45 PM @ Room 210 #70
Poster – In Tue Poster Session A
Peiqi Wang · Xinfeng Xie · Lei Deng · Guoqi Li · Dongsheng Wang · Yuan Xie

A General Method for Amortizing Variational Filtering

Tue Dec 4th 10:45 AM – 12:45 PM @ Room 210 #71
Poster – In Tue Poster Session A
Joseph Marino · Milan Cvitkovic · Yisong Yue

Multiple Instance Learning for Efficient Sequential Data Classification on Resource-constrained Devices

Tue Dec 4th 10:45 AM – 12:45 PM @ Room 210 #72
Poster – In Tue Poster Session A
Don Dennis · Chirag Pabbaraju · Harsha Vardhan Simhadri · Prateek Jain

Navigating with Graph Representations for Fast and Scalable Decoding of Neural Language Models

Tue Dec 4th 10:45 AM – 12:45 PM @ Room 210 #73
Poster – In Tue Poster Session A
Minjia Zhang · Wenhan Wang · Xiaodong Liu · Jianfeng Gao · Yuxiong He

Representer Point Selection for Explaining Deep Neural Networks

Tue Dec 4th 10:45 AM – 12:45 PM @ Room 210 #74
Poster – In Tue Poster Session A
Chih-Kuan Yeh · Joon Kim · Ian En-Hsu Yen · Pradeep Ravikumar

Interpreting Neural Network Judgments via Minimal, Stable, and Symbolic Corrections

Tue Dec 4th 10:45 AM – 12:45 PM @ Room 210 #75
Poster – In Tue Poster Session A
Xin Zhang · Armando Solar-Lezama · Rishabh Singh

DropMax: Adaptive Variational Softmax

Tue Dec 4th 10:45 AM – 12:45 PM @ Room 210 #76
Poster – In Tue Poster Session A
Hae Beom Lee · Juho Lee · Saehoon Kim · Eunho Yang · Sung Ju Hwang

Out-of-Distribution Detection using Multiple Semantic Label Representations

Tue Dec 4th 10:45 AM – 12:45 PM @ Room 210 #77
Poster – In Tue Poster Session A
Gabi Shalev · Yossi Adi · Joseph Keshet

End-to-end Symmetry Preserving Inter-atomic Potential Energy Model for Finite and Extended Systems

Tue Dec 4th 10:45 AM – 12:45 PM @ Room 210 #78
Poster – In Tue Poster Session A
Linfeng Zhang · Jiequn Han · Han Wang · Wissam Saidi · Roberto Car · Weinan E

Deep Predictive Coding Network with Local Recurrent Processing for Object Recognition

Tue Dec 4th 10:45 AM – 12:45 PM @ Room 210 #79
Poster – In Tue Poster Session A
Kuan Han · Haiguang Wen · Yizhen Zhang · Di Fu · Eugenio Culurciello · Zhongming Liu

SLAYER: Spike Layer Error Reassignment in Time

Tue Dec 4th 10:45 AM – 12:45 PM @ Room 210 #80
Poster – In Tue Poster Session A
Sumit Bam Shrestha · Garrick Orchard

DeepPINK: reproducible feature selection in deep neural networks

Tue Dec 4th 10:45 AM – 12:45 PM @ Room 210 #81
Poster – In Tue Poster Session A
Yang Lu · Yingying Fan · Jinchi Lv · William Stafford Noble

Learning long-range spatial dependencies with horizontal gated recurrent units

Tue Dec 4th 10:45 AM – 12:45 PM @ Room 210 #82
Poster – In Tue Poster Session A
Drew Linsley · Junkyung Kim · Vijay Veerabadran · Charles Windolf · Thomas Serre

Neural Interaction Transparency (NIT): Disentangling Learned Interactions for Improved Interpretability

Tue Dec 4th 10:45 AM – 12:45 PM @ Room 210 #83
Poster – In Tue Poster Session A
Michael Tsang · Hanpeng Liu · Sanjay Purushotham · Pavankumar Murali · Yan Liu

A Bridging Framework for Model Optimization and Deep Propagation

Tue Dec 4th 10:45 AM – 12:45 PM @ Room 210 #84
Poster – In Tue Poster Session A
Risheng Liu · Shichao Cheng · xiaokun liu · Long Ma · Xin Fan · Zhongxuan Luo

The Importance of Sampling inMeta-Reinforcement Learning

Tue Dec 4th 10:45 AM – 12:45 PM @ Room 210 #85
Poster – In Tue Poster Session A
Bradly Stadie · Ge Yang · Rein Houthooft · Peter Chen · Yan Duan · Yuhuai Wu · Pieter Abbeel · Ilya Sutskever

Latent Alignment and Variational Attention

Tue Dec 4th 10:45 AM – 12:45 PM @ Room 210 #86
Poster – In Tue Poster Session A
Yuntian Deng · Yoon Kim · Justin Chiu · Demi Guo · Alexander Rush

Variational Memory Encoder-Decoder

Tue Dec 4th 10:45 AM – 12:45 PM @ Room 210 #87
Poster – In Tue Poster Session A
Hung Le · Truyen Tran · Thin Nguyen · Svetha Venkatesh

Relational recurrent neural networks

Tue Dec 4th 10:45 AM – 12:45 PM @ Room 210 #88
Poster – In Tue Poster Session A
Adam Santoro · Ryan Faulkner · David Raposo · Jack Rae · Mike Chrzanowski · Theophane Weber · Daan Wierstra · Oriol Vinyals · Razvan Pascanu · Timothy Lillicrap

Learning to Reason with Third Order Tensor Products

Tue Dec 4th 10:45 AM – 12:45 PM @ Room 210 #89
Poster – In Tue Poster Session A
Imanol Schlag · J?rgen Schmidhuber

Reversible Recurrent Neural Networks

Tue Dec 4th 10:45 AM – 12:45 PM @ Room 210 #90
Poster – In Tue Poster Session A
Matthew MacKay · Paul Vicol · Jimmy Ba · Roger Grosse

Breaking the Activation Function Bottleneck through Adaptive
Parameterization

Tue Dec 4th 10:45 AM – 12:45 PM @ Room 210 #91
Poster – In Tue Poster Session A
Sebastian Flennerhag · Hujun Yin · John Keane · Mark Elliot

BRITS: Bidirectional Recurrent Imputation for Time Series

Tue Dec 4th 10:45 AM – 12:45 PM @ Room 210 #92
Poster – In Tue Poster Session A
Wei Cao · Qi Wei · Jian Li · Hao Zhou · Lei Li · Yitan Li

Complex Gated Recurrent Neural Networks

Tue Dec 4th 10:45 AM – 12:45 PM @ Room 210 #93
Poster – In Tue Poster Session A
Moritz Wolter · Angela Yao

Middle-Out Decoding

Tue Dec 4th 10:45 AM – 12:45 PM @ Room 210 #94
Poster – In Tue Poster Session A
Shikib Mehri · Leonid Sigal

Recurrently Controlled Recurrent Networks

Tue Dec 4th 10:45 AM – 12:45 PM @ Room 210 #95
Poster – In Tue Poster Session A
Yi Tay · Anh Tuan Luu · Siu Cheung Hui

Tree-to-tree Neural Networks for Program Translation

Tue Dec 4th 10:45 AM – 12:45 PM @ Room 210 #96
Poster – In Tue Poster Session A
Xinyun Chen · Chang Liu · Dawn Song

HOUDINI: Lifelong Learning as Program Synthesis

Tue Dec 4th 10:45 AM – 12:45 PM @ Room 210 #97
Poster – In Tue Poster Session A
Lazar Valkov · Dipak Chaudhari · Akash Srivastava · Charles Sutton
· Swarat Chaudhuri

Neural Guided Constraint Logic Programming for Program
Synthesis

Tue Dec 4th 10:45 AM – 12:45 PM @ Room 210 #98
Poster – In Tue Poster Session A
Lisa Zhang · Gregory Rosenblatt · Ethan Fetaya · Renjie Liao ·
William Byrd · Matthew Might · Raquel Urtasun · Richard Zemel

Embedding Logical Queries on Knowledge Graphs

Tue Dec 4th 10:45 AM – 12:45 PM @ Room 210 #99
Poster – In Tue Poster Session A
Will Hamilton · Payal Bajaj · Marinka Zitnik · Dan Jurafsky · Jure
Leskovec

Expanding Holographic Embeddings for Knowledge Completion

Tue Dec 4th 10:45 AM – 12:45 PM @ Room 210 #100
Poster – In Tue Poster Session A
Yexiang Xue · Yang Yuan · Zhitian Xu · Ashish Sabharwal

On the Dimensionality of Word Embedding

Tue Dec 4th 10:45 AM – 12:45 PM @ Room 517 AB #101
Poster – In Tue Poster Session A
Zi Yin · Yuanyuan Shen

Flexible neural representation for physics prediction

Tue Dec 4th 10:45 AM – 12:45 PM @ Room 517 AB #102
Poster – In Tue Poster Session A
Damian Mrowca · Chengxu Zhuang · Elias Wang · Nick Haber · Li
Fei-Fei · Josh Tenenbaum · Daniel Yamins

Content preserving text generation with attribute controls

Tue Dec 4th 10:45 AM – 12:45 PM @ Room 517 AB #103
Poster – In Tue Poster Session A
Lajanugen Logeswaran · Honglak Lee · Samy Bengio

Recurrent Relational Networks

Tue Dec 4th 10:45 AM – 12:45 PM @ Room 517 AB #104
Poster – In Tue Poster Session A
Rasmus Palm · Ulrich Paquet · Ole Winther

GLoMo: Unsupervised Learning of Transferable Relational Graphs

Tue Dec 4th 10:45 AM – 12:45 PM @ Room 517 AB #105
Poster – In Tue Poster Session A
Zhilin Yang · Jake Zhao · Bhuwan Dhingra · Kaiming He · William
Cohen · Ruslan Salakhutdinov · Yann LeCun

Predictive Uncertainty Estimation via Prior Networks

Tue Dec 4th 10:45 AM – 12:45 PM @ Room 517 AB #106
Poster – In Tue Poster Session A
Andrey Malinin · Mark Gales

Adversarial Multiple Source Domain Adaptation

Tue Dec 4th 10:45 AM – 12:45 PM @ Room 517 AB #107
Poster – In Tue Poster Session A
Han Zhao · Shanghang Zhang · Guanhang Wu · Jos? M. F. Moura
· Joao P Costeira · Geoffrey Gordon

Adversarial Examples that Fool both Computer Vision and
Time-Limited Humans

Tue Dec 4th 10:45 AM – 12:45 PM @ Room 517 AB #108
Poster – In Tue Poster Session A
Gamaleldin Elsayed · Shreya Shankar · Brian Cheung · Nicolas Pa-
pernot · Alexey Kurakin · Ian Goodfellow · Jascha Sohl-Dickstein

A Simple Cache Model for Image Recognition

Tue Dec 4th 10:45 AM – 12:45 PM @ Room 517 AB #109
Poster – In Tue Poster Session A
Emin Orhan

Co-teaching: Robust training of deep neural networks with
extremely noisy labels

Tue Dec 4th 10:45 AM – 12:45 PM @ Room 517 AB #110
Poster – In Tue Poster Session A
Bo Han · Quanming Yao · Xingrui Yu · Gang Niu · Miao Xu ·
Weihua Hu · Ivor Tsang · Masashi Sugiyama

Improved Network Robustness with Adversary Critic

Tue Dec 4th 10:45 AM – 12:45 PM @ Room 517 AB #111
Poster – In Tue Poster Session A
Alexander Matyasko · Lap-Pui Chau

Unsupervised Learning of Object Landmarks through Conditional
Image Generation

Tue Dec 4th 10:45 AM – 12:45 PM @ Room 517 AB #112
Poster – In Tue Poster Session A
Tomas Jakab · Ankush Gupta · Hakan Bilen · Andrea Vedaldi

Multi-Task Learning as Multi-Objective Optimization

Tue Dec 4th 10:45 AM – 12:45 PM @ Room 517 AB #113
Poster – In Tue Poster Session A
Ozan Sener · Vladlen Koltun

Deep Anomaly Detection Using Geometric Transformations

Tue Dec 4th 10:45 AM – 12:45 PM @ Room 517 AB #114
Poster – In Tue Poster Session A
Izhak Golan · Ran El-Yaniv

Practical Deep Stereo (PDS): Toward applications-friendly deep
stereo matching

Tue Dec 4th 10:45 AM – 12:45 PM @ Room 517 AB #115
Poster – In Tue Poster Session A
Stepan Tulyakov · Anton Ivanov · Fran?ois Fleuret

VideoCapsuleNet: A Simplified Network for Action Detection

Tue Dec 4th 10:45 AM – 12:45 PM @ Room 517 AB #116
Poster – In Tue Poster Session A
Kevin Duarte · Yogesh Rawat · Mubarak Shah

With Friends Like These, Who Needs Adversaries?

Tue Dec 4th 10:45 AM – 12:45 PM @ Room 517 AB #117
Poster – In Tue Poster Session A
Saumya Jetley · Nicholas Lord · Philip Torr

Multi-Task Zipping via Layer-wise Neuron Sharing

Tue Dec 4th 10:45 AM – 12:45 PM @ Room 517 AB #118
Poster – In Tue Poster Session A
Xiaoxi He · Zimu Zhou · Lothar Thiele

Learning Versatile Filters for Efficient Convolutional Neural
Networks

Tue Dec 4th 10:45 AM – 12:45 PM @ Room 517 AB #119
Poster – In Tue Poster Session A
Yunhe Wang · Chang Xu · Chunjing XU · Chao Xu · Dacheng Tao

Evolutionary Stochastic Gradient Descent for Optimization of
Deep Neural Networks

Tue Dec 4th 10:45 AM – 12:45 PM @ Room 517 AB #120
Poster – In Tue Poster Session A
Xiaodong Cui · Wei Zhang · Zolt?n T?ske · Michael Picheny

Structure-Aware Convolutional Neural Networks

Tue Dec 4th 10:45 AM – 12:45 PM @ Room 517 AB #121
Poster – In Tue Poster Session A
Jianlong Chang · Jie Gu · Lingfeng Wang · GAOFENG MENG ·
SHIMING XIANG · Chunhong Pan

Global Gated Mixture of Second-order Pooling for Improving
Deep Convolutional Neural Networks

Tue Dec 4th 10:45 AM – 12:45 PM @ Room 517 AB #122
Poster – In Tue Poster Session A
Qilong Wang · Zilin Gao · Jiangtao Xie · Wangmeng Zuo · Peihua
Li

Hybrid Macro/Micro Level Backpropagation for Training Deep
Spiking Neural Networks

Tue Dec 4th 10:45 AM – 12:45 PM @ Room 517 AB #123
Poster – In Tue Poster Session A
Yingyezhe Jin · Wenrui Zhang · Peng Li

Deep Neural Nets with Interpolating Function as Output
Activation

Tue Dec 4th 10:45 AM – 12:45 PM @ Room 517 AB #124
Poster – In Tue Poster Session A
Bao Wang · Xiyang Luo · Zhen Li · Wei Zhu · Zuoqiang Shi · Stanley
Osher

Neural Edit Operations for Biological Sequences

Tue Dec 4th 10:45 AM – 12:45 PM @ Room 517 AB #125
Poster – In Tue Poster Session A
Satoshi Koide · Keisuke Kawano · Takuro Kutsuna

Improved Expressivity Through Dendritic Neural Networks

Tue Dec 4th 10:45 AM – 12:45 PM @ Room 517 AB #126
Poster – In Tue Poster Session A
Xundong Wu · Xiangwen Liu · wei li · qing wu

Neural Proximal Gradient Descent for Compressive Imaging

Tue Dec 4th 10:45 AM – 12:45 PM @ Room 517 AB #127
Poster – In Tue Poster Session A
Morteza Mardani · Qingyun Sun · David Donoho · Vardan Papyan
· Hatef Monajemi · Shreyas Vasanawala · John Pauly

Sigsoftmax: Reanalysis of the Softmax Bottleneck

Tue Dec 4th 10:45 AM – 12:45 PM @ Room 517 AB #128
Poster – In Tue Poster Session A
Sekitoshi Kanai · Yasuhiro Fujiwara · Yuki Yamanaka · Shuichi
Adachi

Visualizing the Loss Landscape of Neural Nets

Tue Dec 4th 10:45 AM – 12:45 PM @ Room 517 AB #129
Poster – In Tue Poster Session A
Hao Li · Zheng Xu · Gavin Taylor · Christoph Studer · Tom Goldstein

Clebsch{Gordan Nets: a Fully Fourier Space Spherical
Convolutional Neural Network

Tue Dec 4th 10:45 AM – 12:45 PM @ Room 517 AB #130
Poster – In Tue Poster Session A
Risi Kondor · Zhen Lin · Shubhendu Trivedi

Adaptive Sampling Towards Fast Graph Representation Learning

Tue Dec 4th 10:45 AM – 12:45 PM @ Room 517 AB #131
Poster – In Tue Poster Session A
Wenbing Huang · Tong Zhang · Yu Rong · Junzhou Huang

NAIS-Net: Stable Deep Networks from Non-Autonomous
Differential Equations

Tue Dec 4th 10:45 AM – 12:45 PM @ Room 517 AB #132
Poster – In Tue Poster Session A
Marco Ciccone · Marco Gallieri · Jonathan Masci · Christian Os-
endorfer · Faustino Gomez

Scaling provable adversarial defenses

Tue Dec 4th 10:45 AM – 12:45 PM @ Room 517 AB #133
Poster – In Tue Poster Session A
Eric Wong · Frank Schmidt · Jan Hendrik Metzen · J. Zico Kolter

Lipschitz regularity of deep neural networks: analysis and
efficient estimation

Tue Dec 4th 10:45 AM – 12:45 PM @ Room 517 AB #134
Poster – In Tue Poster Session A
Aladin Virmaux · Kevin Scaman

Training DNNs with Hybrid Block Floating Point

Tue Dec 4th 10:45 AM – 12:45 PM @ Room 517 AB #135
Poster – In Tue Poster Session A
Mario Drumond · Tao LIN · Martin Jaggi · Babak Falsafi

Mesh-TensorFlow: Deep Learning for Supercomputers

Tue Dec 4th 10:45 AM – 12:45 PM @ Room 517 AB #136
Poster – In Tue Poster Session A
Noam Shazeer · Youlong Cheng · Niki Parmar · Dustin Tran · Ashish
Vaswani · Penporn Koanantakool · Peter Hawkins · HyoukJoong Lee
· Mingsheng Hong · Cliff Young · Ryan Sepassi · Blake Hechtman

Thwarting Adversarial Examples: An L_0-Robust Sparse Fourier
Transform

Tue Dec 4th 10:45 AM – 12:45 PM @ Room 517 AB #137
Poster – In Tue Poster Session A
Mitali Bafna · Jack Murtagh · Nikhil Vyas

Bayesian Adversarial Learning

Tue Dec 4th 10:45 AM – 12:45 PM @ Room 517 AB #138
Poster – In Tue Poster Session A
Nanyang Ye · Zhanxing Zhu

Dendritic cortical microcircuits approximate the
backpropagation algorithm

Tue Dec 4th 10:45 AM – 12:45 PM @ Room 517 AB #139
Poster – In Tue Poster Session A
Jo?o Sacramento · Rui Ponte Costa · Yoshua Bengio · Walter Senn

Learning a latent manifold of odor representations from neural
responses in piriform cortex

Tue Dec 4th 10:45 AM – 12:45 PM @ Room 517 AB #140
Poster – In Tue Poster Session A
Anqi Wu · Stan Pashkovski · Sandeep Datta · Jonathan W Pillow

Size-Noise Tradeoffs in Generative Networks

Tue Dec 4th 10:45 AM – 12:45 PM @ Room 517 AB #141
Poster – In Tue Poster Session A
Bolton Bailey · Matus Telgarsky

On Neuronal Capacity

Tue Dec 4th 10:45 AM – 12:45 PM @ Room 517 AB #142
Poster – In Tue Poster Session A
Pierre Baldi · Roman Vershynin

Learning Overparameterized Neural Networks via Stochastic
Gradient Descent on Structured Data

Tue Dec 4th 10:45 AM – 12:45 PM @ Room 517 AB #143
Poster – In Tue Poster Session A
Yuanzhi Li · Yingyu Liang

Deep, complex, invertible networks for inversion of
transmission effects in multimode optical fibres

Tue Dec 4th 10:45 AM – 12:45 PM @ Room 517 AB #144
Poster – In Tue Poster Session A
Ois?n Moran · Piergiorgio Caramazza · Daniele Faccio · Roderick
Murray-Smith

Learning towards Minimum Hyperspherical Energy

Tue Dec 4th 10:45 AM – 12:45 PM @ Room 517 AB #145
Poster – In Tue Poster Session A
Weiyang Liu · Rongmei Lin · Zhen Liu · Lixin Liu · Zhiding Yu · Bo
Dai · Le Song

Soft-Gated Warping-GAN for Pose-Guided Person Image Synthesis

Tue Dec 4th 10:45 AM – 12:45 PM @ Room 517 AB #146
Poster – In Tue Poster Session A
Haoye Dong · Xiaodan Liang · Ke Gong · Hanjiang Lai · Jia Zhu ·
Jian Yin

Deep Attentive Tracking via Reciprocative Learning

Tue Dec 4th 10:45 AM – 12:45 PM @ Room 517 AB #147
Poster – In Tue Poster Session A
Shi Pu · Yibing Song · Chao Ma · Honggang Zhang · Ming-Hsuan
Yang

Robot Learning in Homes: Improving Generalization and Reducing
Dataset Bias

Tue Dec 4th 10:45 AM – 12:45 PM @ Room 517 AB #148
Poster – In Tue Poster Session A
Abhinav Gupta · Adithyavairavan Murali · Dhiraj Prakashchand
Gandhi · Lerrel Pinto

A flexible model for training action localization with varying
levels of supervision

Tue Dec 4th 10:45 AM – 12:45 PM @ Room 517 AB #149
Poster – In Tue Poster Session A
Guilhem Ch?ron · Jean-Baptiste Alayrac · Ivan Laptev · Cordelia
Schmid

Bilinear Attention Networks

Tue Dec 4th 10:45 AM – 12:45 PM @ Room 517 AB #150
Poster – In Tue Poster Session A
Jin-Hwa Kim · Jaehyun Jun · Byoung-Tak Zhang

MacNet: Transferring Knowledge from Machine Comprehension to
Sequence-to-Sequence Models

Tue Dec 4th 10:45 AM – 12:45 PM @ Room 517 AB #151
Poster – In Tue Poster Session A
Boyuan Pan · Yazheng Yang · Hao Li · Zhou Zhao · Yueting Zhuang
· Deng Cai · Xiaofei He

Diffusion Maps for Textual Network Embedding

Tue Dec 4th 10:45 AM – 12:45 PM @ Room 517 AB #152
Poster – In Tue Poster Session A
Xinyuan Zhang · Yitong Li · Dinghan Shen · Lawrence Carin

FRAGE: Frequency-Agnostic Word Representation

Tue Dec 4th 10:45 AM – 12:45 PM @ Room 517 AB #153
Poster – In Tue Poster Session A
Chengyue Gong · Di He · Xu Tan · Tao Qin · Liwei Wang · Tie-Yan
Liu

A Retrieve-and-Edit Framework for Predicting Structured Outputs

Tue Dec 4th 10:45 AM – 12:45 PM @ Room 517 AB #154
Poster – In Tue Poster Session A
Tatsunori Hashimoto · Kelvin Guu · Yonatan Oren · Percy Liang

Unsupervised Text Style Transfer using Language Models as
Discriminators

Tue Dec 4th 10:45 AM – 12:45 PM @ Room 517 AB #155
Poster – In Tue Poster Session A
Zichao Yang · Zhiting Hu · Chris Dyer · Eric Xing · Taylor Berg-
Kirkpatrick

Unsupervised Cross-Modal Alignment of Speech and Text
Embedding Spaces

Tue Dec 4th 10:45 AM – 12:45 PM @ Room 517 AB #156
Poster – In Tue Poster Session A
Yu-An Chung · Wei-Hung Weng · Schrasing Tong · James Glass

GradiVeQ: Vector Quantization for Bandwidth-Efficient Gradient
Aggregation in Distributed CNN Training

Tue Dec 4th 10:45 AM – 12:45 PM @ Room 517 AB #157
Poster – In Tue Poster Session A
Mingchao Yu · Zhifeng Lin · Krishna Narra · Songze Li · Youjie Li ·
Nam Sung Kim · Alexander Schwing · Murali Annavaram · Salman
Avestimehr

Gradient Sparsification for Communication-Efficient
Distributed Optimization

Tue Dec 4th 10:45 AM – 12:45 PM @ Room 517 AB #158
Poster – In Tue Poster Session A
Jianqiao Wangni · Jialei Wang · Ji Liu · Tong Zhang

Bayesian multi-domain learning for cancer subtype discovery
from next-generation sequencing count data

Tue Dec 4th 10:45 AM – 12:45 PM @ Room 517 AB #159
Poster – In Tue Poster Session A
Ehsan Hajiramezanali · Siamak Zamani Dadaneh · Alireza Kar-
balayghareh · Mingyuan Zhou · Xiaoning Qian

Parsimonious Quantile Regression of Financial Asset Tail
Dynamics via Sequential Learning

Tue Dec 4th 10:45 AM – 12:45 PM @ Room 517 AB #160
Poster – In Tue Poster Session A
Xing Yan · Weizhong Zhang · Lin Ma · Wei Liu · Qi Wu

Global Geometry of Multichannel Sparse Blind Deconvolution on
the Sphere

Tue Dec 4th 10:45 AM – 12:45 PM @ Room 517 AB #161
Poster – In Tue Poster Session A
Yanjun Li · Yoram Bresler

Phase Retrieval Under a Generative Prior

Tue Dec 4th 10:45 AM – 12:45 PM @ Room 517 AB #162
Poster – In Tue Poster Session A
Paul Hand · Oscar Leong · Vlad Voroninski

Theoretical Linear Convergence of Unfolded ISTA and Its
Practical Weights and Thresholds

Tue Dec 4th 10:45 AM – 12:45 PM @ Room 517 AB #163
Poster – In Tue Poster Session A
Xiaohan Chen · Jialin Liu · Zhangyang Wang · Wotao Yin

Modern Neural Networks Generalize on Small Data Sets

Tue Dec 4th 10:45 AM – 12:45 PM @ Room 517 AB #164
Poster – In Tue Poster Session A
Matthew Olson · Abraham Wyner · Richard Berk

Co-regularized Alignment for Unsupervised Domain Adaptation

Tue Dec 4th 10:45 AM – 12:45 PM @ Room 517 AB #165
Poster – In Tue Poster Session A
Abhishek Kumar · Prasanna Sattigeri · Kahini Wadhawan · Leonid
Karlinsky · Rogerio Feris · Bill Freeman · Gregory Wornell

Neural Networks Trained to Solve Differential Equations Learn
General Representations

Tue Dec 4th 10:45 AM – 12:45 PM @ Room 517 AB #166
Poster – In Tue Poster Session A
Martin Magill · Faisal Qureshi · Hendrick de Haan

Spectral Filtering for General Linear Dynamical Systems

Tue Dec 4th 10:45 AM – 12:45 PM @ Room 517 AB #167
Poster – In Tue Poster Session A
Elad Hazan · HOLDEN LEE · Karan Singh · Cyril Zhang · Yi Zhang

Where Do You Think You're Going?: Inferring Beliefs about
Dynamics from Behavior

Tue Dec 4th 10:45 AM – 12:45 PM @ Room 517 AB #168
Poster – In Tue Poster Session A
Sid Reddy · Anca Dragan · Sergey Levine

Lunch on your own

Tue Dec 4th 12:45 – 02:15 PM @
Break –

Lunch on your own

Tue Dec 4th 12:45 – 02:15 PM @
Break –

Inclusion and Diversity Town Hall

Tue Dec 4th 01:15 – 02:15 PM @ Room 517 CD
Break –

What Bodies Think About: Bioelectric Computation Outside the
Nervous System, Primitive Cognition, and Synthetic Morphology

Tue Dec 4th 02:15 – 03:05 PM @ Rooms 220 CDE
Invited Talk – In Tue Invited Talk 2
Michael Levin

Coffee Break

Tue Dec 4th 03:05 – 03:30 PM @
Break –

In Tue Track 1 – Session 2

**Tue Dec 4th 03:30 – 03:35 PM @ Room 220 CD – Tue Dec
4th 04:55 – 05:00 PM @ Room 220 CD**

Neural Voice Cloning with a Few Samples

Tue Dec 4th 03:30 – 03:35 PM @ Room 220 CD
Spotlight – In Tue Track 1 – Session 2
Sercan Arik · Jitong Chen · Kainan Peng · Wei Ping · Yanqi Zhou
Poster Tue Dec 4th 05:00 – 07:00 PM @ Room 210 #91

Answerer in Questioner's Mind: Information Theoretic Approach
to Goal-Oriented Visual Dialog

Tue Dec 4th 03:35 – 03:40 PM @ Room 220 CD
Spotlight – In Tue Track 1 – Session 2
Sang-Woo Lee · Yu-Jung Heo · Byoung-Tak Zhang
Poster Tue Dec 4th 05:00 – 07:00 PM @ Room 210 #95

Neural-Symbolic VQA: Disentangling Reasoning from Vision and
Language Understanding

Tue Dec 4th 03:40 – 03:45 PM @ Room 220 CD
Spotlight – In Tue Track 1 – Session 2
Kexin Yi · Jiajun Wu · Chuang Gan · Antonio Torralba · Pushmeet
Kohli · Josh Tenenbaum
Poster Tue Dec 4th 05:00 – 07:00 PM @ Room 210 #21

Learning to Optimize Tensor Programs

Tue Dec 4th 03:45 – 03:50 PM @ Room 220 CD
Spotlight – In Tue Track 1 – Session 2
Tianqi Chen · Lianmin Zheng · Eddie Yan · Ziheng Jiang · Thierry
Moreau · Luis Ceze · Carlos Guestrin · Arvind Krishnamurthy
Poster Tue Dec 4th 05:00 – 07:00 PM @ Room 517 AB #104

Generalisation of structural knowledge in the
hippocampal-entorhinal system

Tue Dec 4th 03:50 – 04:05 PM @ Room 220 CD
Oral – In Tue Track 1 – Session 2
James Whittington · Timothy Muller · Shirely Mark · Caswell Barry
· Tim Behrens
Poster Tue Dec 4th 05:00 – 07:00 PM @ Room 210 #19

A Likelihood-Free Inference Framework for Population Genetic
Data using Exchangeable Neural Networks

Tue Dec 4th 04:05 – 04:10 PM @ Room 220 CD
Spotlight – In Tue Track 1 – Session 2
Jeffrey Chan · Valerio Perrone · Jeffrey Spence · Paul Jenkins · Sara
Mathieson · Yun Song
Poster Tue Dec 4th 05:00 – 07:00 PM @ Room 517 AB #111

Generalizing Tree Probability Estimation via Bayesian Networks

Tue Dec 4th 04:10 – 04:15 PM @ Room 220 CD
Spotlight – In Tue Track 1 – Session 2
Cheng Zhang · Frederick A Matsen IV
Poster Tue Dec 4th 05:00 – 07:00 PM @ Room 517 AB #123

Geometry Based Data Generation

Tue Dec 4th 04:15 – 04:20 PM @ Room 220 CD
Spotlight – In Tue Track 1 – Session 2
Ofir Lindenbaum · Jay Stanley · Guy Wolf · Smita Krishnaswamy
Poster Tue Dec 4th 05:00 – 07:00 PM @ Room 517 AB #121

Point process latent variable models of larval zebrafish
behavior

Tue Dec 4th 04:20 – 04:25 PM @ Room 220 CD
Spotlight – In Tue Track 1 – Session 2
Anuj Sharma · Robert Johnson · Florian Engert · Scott Linderman
Poster Tue Dec 4th 05:00 – 07:00 PM @ Room 210 #1

A probabilistic population code based on neural samples

Tue Dec 4th 04:25 – 04:40 PM @ Room 220 CD
Oral – In Tue Track 1 – Session 2
Sabyasachi Shivkumar · Richard Lange · Ankani Chattoraj · Ralf
Haefner
Poster Tue Dec 4th 05:00 – 07:00 PM @ Room 210 #26

Sparse Attentive Backtracking: Temporal Credit Assignment Through Reminding

Tue Dec 4th 04:40 – 04:45 PM @ Room 220 CD
Spotlight – In Tue Track 1 – Session 2
Nan Rosemary Ke · Anirudh Goyal ALIAS PARTH GOYAL · Olexa Bilaniuk · Jonathan Binas · Michael Mozer · Chris Pal · Yoshua Bengio
Poster Tue Dec 4th 05:00 – 07:00 PM @ Room 210 #23

Learning Temporal Point Processes via Reinforcement Learning

Tue Dec 4th 04:45 – 04:50 PM @ Room 220 CD
Spotlight – In Tue Track 1 – Session 2
Shuang Li · Shuai Xiao · Shixiang Zhu · Nan Du · Yao Xie · Le Song
Poster Tue Dec 4th 05:00 – 07:00 PM @ Room 517 AB #124

Precision and Recall for Time Series

Tue Dec 4th 04:50 – 04:55 PM @ Room 220 CD
Spotlight – In Tue Track 1 – Session 2
Nesime Tatbul · Tae Jun Lee · Stan Zdonik · Mejbah Alam · Justin Gottschlich
Poster Tue Dec 4th 05:00 – 07:00 PM @ Room 517 AB #116

Bayesian Nonparametric Spectral Estimation

Tue Dec 4th 04:55 – 05:00 PM @ Room 220 CD
Spotlight – In Tue Track 1 – Session 2
Felipe Tobar
Poster Tue Dec 4th 05:00 – 07:00 PM @ Room 517 AB #114

In Tue Track 2 – Session 2

Tue Dec 4th 03:30 – 03:35 PM @ Room 220 E – Tue Dec 4th 04:55 – 05:00 PM @ Room 220 E

Evolved Policy Gradients

Tue Dec 4th 03:30 – 03:35 PM @ Room 220 E
Spotlight – In Tue Track 2 – Session 2
Rein Houthooft · Yuhua Chen · Phillip Isola · Bradly Stadie · Filip Wolski · OpenAI Jonathan Ho · Pieter Abbeel
Poster Tue Dec 4th 05:00 – 07:00 PM @ Room 210 #16

Adapted Deep Embeddings: A Synthesis of Methods for k-Shot Inductive Transfer Learning

Tue Dec 4th 03:35 – 03:40 PM @ Room 220 E
Spotlight – In Tue Track 2 – Session 2
Tyler Scott · Karl Ridgeway · Michael Mozer
Poster Tue Dec 4th 05:00 – 07:00 PM @ Room 517 AB #167

Bayesian Model-Agnostic Meta-Learning

Tue Dec 4th 03:40 – 03:45 PM @ Room 220 E
Spotlight – In Tue Track 2 – Session 2
Jaesik Yoon · Taesup Kim · Ousmane Dia · Sungwoong Kim · Yoshua Bengio · Sungjin Ahn
Poster Tue Dec 4th 05:00 – 07:00 PM @ Room 210 #15

Probabilistic Neural Programmed Networks for Scene Generation

Tue Dec 4th 03:45 – 03:50 PM @ Room 220 E
Spotlight – In Tue Track 2 – Session 2
Zhiwei Deng · Jiacheng Chen · YIFANG FU · Greg Mori
Poster Tue Dec 4th 05:00 – 07:00 PM @ Room 210 #7

Neural Ordinary Differential Equations

Tue Dec 4th 03:50 – 04:05 PM @ Room 220 E
Oral – In Tue Track 2 – Session 2
Tian Qi Chen · Yulia Rubanova · Jesse Bettencourt · David Duvenaud
Poster Tue Dec 4th 05:00 – 07:00 PM @ Room 210 #3

Bias and Generalization in Deep Generative Models: An Empirical Study

Tue Dec 4th 04:05 – 04:10 PM @ Room 220 E
Spotlight – In Tue Track 2 – Session 2
Shengjia Zhao · Hongyu Ren · Arianna Yuan · Jiaming Song · Noah Goodman · Stefano Ermon
Poster Tue Dec 4th 05:00 – 07:00 PM @ Room 210 #6

Robustness of conditional GANs to noisy labels

Tue Dec 4th 04:10 – 04:15 PM @ Room 220 E
Spotlight – In Tue Track 2 – Session 2
Kiran Thekumparampil · Ashish Khetan · Zinan Lin · Sewoong Oh
Poster Tue Dec 4th 05:00 – 07:00 PM @ Room 210 #5

BourGAN: Generative Networks with Metric Embeddings

Tue Dec 4th 04:15 – 04:20 PM @ Room 220 E
Spotlight – In Tue Track 2 – Session 2
Chang Xiao · Peilin Zhong · Changxi Zheng
Poster Tue Dec 4th 05:00 – 07:00 PM @ Room 210 #17

Loss Surfaces, Mode Connectivity, and Fast Ensembling of DNNs

Tue Dec 4th 04:20 – 04:25 PM @ Room 220 E
Spotlight – In Tue Track 2 – Session 2
Timur Garipov · Pavel Izmailov · Dmitrii Podoprikhin · Dmitry Vetrov · Andrew Wilson
Poster Tue Dec 4th 05:00 – 07:00 PM @ Room 517 AB #162

How Does Batch Normalization Help Optimization?

Tue Dec 4th 04:25 – 04:40 PM @ Room 220 E
Oral – In Tue Track 2 – Session 2
Shibani Santurkar · Dimitris Tsipras · Andrew Ilyas · Aleksander Madry
Poster Tue Dec 4th 05:00 – 07:00 PM @ Room 210 #10

Training Neural Networks Using Features Replay

Tue Dec 4th 04:40 – 04:45 PM @ Room 220 E
Spotlight – In Tue Track 2 – Session 2
Zhouyuan Huo · Bin Gu · Heng Huang
Poster Tue Dec 4th 05:00 – 07:00 PM @ Room 210 #12

Step Size Matters in Deep Learning

Tue Dec 4th 04:45 – 04:50 PM @ Room 220 E
Spotlight – In Tue Track 2 – Session 2
Kamil Nar · Shankar Sastry
Poster Tue Dec 4th 05:00 – 07:00 PM @ Room 210 #8

Neural Tangent Kernel: Convergence and Generalization in Neural Networks

Tue Dec 4th 04:50 – 04:55 PM @ Room 220 E
Spotlight – In Tue Track 2 – Session 2
Arthur Jacot-Guillarmod · Clement Hongler · Franck Gabriel
Poster Tue Dec 4th 05:00 – 07:00 PM @ Room 210 #9

Hierarchical Graph Representation Learning with Differentiable Pooling

Tue Dec 4th 04:55 – 05:00 PM @ Room 220 E
Spotlight – In Tue Track 2 – Session 2
Zhitao Ying · Jiaxuan You · Christopher Morris · Xiang Ren · Will Hamilton · Jure Leskovec
Poster Tue Dec 4th 05:00 – 07:00 PM @ Room 210 #14

In Tue Track 3 – Session 2

Tue Dec 4th 03:30 – 03:35 PM @ Room 517 CD – Tue Dec 4th 04:55 – 05:00 PM @ Room 517 CD

Differentially Private Testing of Identity and Closeness of Discrete Distributions

Tue Dec 4th 03:30 – 03:35 PM @ Room 517 CD
Spotlight – In Tue Track 3 – Session 2
Jayadev Acharya · Ziteng Sun · Huanyu Zhang
Poster Tue Dec 4th 05:00 – 07:00 PM @ Room 517 AB #151

Local Differential Privacy for Evolving Data

Tue Dec 4th 03:35 – 03:40 PM @ Room 517 CD
Spotlight – In Tue Track 3 – Session 2
Matthew Joseph · Aaron Roth · Jonathan Ullman · Bo Waggoner
Poster Tue Dec 4th 05:00 – 07:00 PM @ Room 517 AB #153

Differentially Private k-Means with Constant Multiplicative Error

Tue Dec 4th 03:40 – 03:45 PM @ Room 517 CD
Spotlight – In Tue Track 3 – Session 2
Uri Stemmer · Haim Kaplan
Poster Tue Dec 4th 05:00 – 07:00 PM @ Room 517 AB #152

A Spectral View of Adversarially Robust Features

Tue Dec 4th 03:45 – 03:50 PM @ Room 517 CD
Spotlight – In Tue Track 3 – Session 2
Shivam Garg · Vatsal Sharan · Brian Zhang · Gregory Valiant
Poster Tue Dec 4th 05:00 – 07:00 PM @ Room 517 AB #156

Model-Agnostic Private Learning

Tue Dec 4th 03:50 – 04:05 PM @ Room 517 CD
Oral – In Tue Track 3 – Session 2
Raef Bassily · Abhradeep Guha Thakurta · Om Dipakbhai Thakkar
Poster Tue Dec 4th 05:00 – 07:00 PM @ Room 210 #30

Bounded-Loss Private Prediction Markets

Tue Dec 4th 04:05 – 04:10 PM @ Room 517 CD
Spotlight – In Tue Track 3 – Session 2
Rafael Frongillo · Bo Waggoner
Poster Tue Dec 4th 05:00 – 07:00 PM @ Room 210 #28

cpSGD: Communication-efficient and differentially-private distributed SGD

Tue Dec 4th 04:10 – 04:15 PM @ Room 517 CD
Spotlight – In Tue Track 3 – Session 2
Naman Agarwal · Ananda Theertha Suresh · Felix Xinnan Yu · Sanjiv Kumar · Brendan McMahan
Poster Tue Dec 4th 05:00 – 07:00 PM @ Room 210 #27

Adversarially Robust Generalization Requires More Data

Tue Dec 4th 04:15 – 04:20 PM @ Room 517 CD
Spotlight – In Tue Track 3 – Session 2
Ludwig Schmidt · Shibani Santurkar · Dimitris Tsipras · Kunal Talwar · Aleksander Madry
Poster Tue Dec 4th 05:00 – 07:00 PM @ Room 210 #31

Attacks Meet Interpretability: Attribute-steered Detection of Adversarial Samples

Tue Dec 4th 04:20 – 04:25 PM @ Room 517 CD
Spotlight – In Tue Track 3 – Session 2
Guanhong Tao · Shiqing Ma · Yingqi Liu · Xiangyu Zhang
Poster Tue Dec 4th 05:00 – 07:00 PM @ Room 210 #99

Learning to Solve SMT Formulas

Tue Dec 4th 04:25 – 04:40 PM @ Room 517 CD
Oral – In Tue Track 3 – Session 2
Mislav Balunovic · Pavol Bielik · Martin Vechev
Poster Tue Dec 4th 05:00 – 07:00 PM @ Room 517 AB #105

Towards Robust Detection of Adversarial Examples

Tue Dec 4th 04:40 – 04:45 PM @ Room 517 CD
Spotlight – In Tue Track 3 – Session 2
Tianyu Pang · Chao Du · Yinpeng Dong · Jun Zhu
Poster Tue Dec 4th 05:00 – 07:00 PM @ Room 210 #11

Neural Architecture Search with Bayesian Optimisation and Optimal Transport

Tue Dec 4th 04:45 – 04:50 PM @ Room 517 CD
Spotlight – In Tue Track 3 – Session 2
Kirthevasan Kandasamy · Willie Neiswanger · Jeff Schneider · Barnabas Poczos · Eric Xing
Poster Tue Dec 4th 05:00 – 07:00 PM @ Room 517 AB #166

Data-Driven Clustering via Parameterized Lloyd's Families

Tue Dec 4th 04:50 – 04:55 PM @ Room 517 CD
Spotlight – In Tue Track 3 – Session 2
Maria-Florina Balcan · Travis Dick · Colin White
Poster Tue Dec 4th 05:00 – 07:00 PM @ Room 517 AB #160

Supervising Unsupervised Learning

Tue Dec 4th 04:55 – 05:00 PM @ Room 517 CD
Spotlight – In Tue Track 3 – Session 2
Vikas Garg · Adam Kalai
Poster Tue Dec 4th 05:00 – 07:00 PM @ Room 517 AB #164

In Tue Poster Session B

Point process latent variable models of larval zebrafish behavior

Tue Dec 4th 05:00 – 07:00 PM @ Room 210 #1
Poster – In Tue Poster Session B
Anuj Sharma · Robert Johnson · Florian Engert · Scott Linderman

Provably Correct Automatic Sub-Differentiation for Qualified Programs

Tue Dec 4th 05:00 – 07:00 PM @ Room 210 #2
Poster – In Tue Poster Session B
Sham Kakade · Jason Lee

Neural Ordinary Differential Equations

Tue Dec 4th 05:00 – 07:00 PM @ Room 210 #3
Poster – In Tue Poster Session B
Tian Qi Chen · Yulia Rubanova · Jesse Bettencourt · David Duvenaud

Information Constraints on Auto-Encoding Variational Bayes

Tue Dec 4th 05:00 – 07:00 PM @ Room 210 #4
Poster – In Tue Poster Session B
Romain Lopez · Jeffrey Regier · Michael Jordan · Nir Yosef

Robustness of conditional GANs to noisy labels

Tue Dec 4th 05:00 – 07:00 PM @ Room 210 #5
Poster – In Tue Poster Session B
Kiran Thekumparampil · Ashish Khetan · Zinan Lin · Sewoong Oh

Bias and Generalization in Deep Generative Models: An Empirical Study

Tue Dec 4th 05:00 – 07:00 PM @ Room 210 #6
Poster – In Tue Poster Session B
Shengjia Zhao · Hongyu Ren · Arianna Yuan · Jiaming Song · Noah Goodman · Stefano Ermon

Probabilistic Neural Programmed Networks for Scene Generation

Tue Dec 4th 05:00 – 07:00 PM @ Room 210 #7
Poster – In Tue Poster Session B
Zhiwei Deng · Jiacheng Chen · YIFANG FU · Greg Mori

Step Size Matters in Deep Learning

Tue Dec 4th 05:00 – 07:00 PM @ Room 210 #8
Poster – In Tue Poster Session B
Kamil Nar · Shankar Sastry

Neural Tangent Kernel: Convergence and Generalization in
Neural Networks

Tue Dec 4th 05:00 – 07:00 PM @ Room 210 #9
Poster – In Tue Poster Session B
Arthur Jacot-Guillarmod · Clement Hongler · Franck Gabriel

How Does Batch Normalization Help Optimization?

Tue Dec 4th 05:00 – 07:00 PM @ Room 210 #10
Poster – In Tue Poster Session B
Shibani Santurkar · Dimitris Tsipras · Andrew Ilyas · Aleksander
Madry

Towards Robust Detection of Adversarial Examples

Tue Dec 4th 05:00 – 07:00 PM @ Room 210 #11
Poster – In Tue Poster Session B
Tianyu Pang · Chao Du · Yinpeng Dong · Jun Zhu

Training Neural Networks Using Features Replay

Tue Dec 4th 05:00 – 07:00 PM @ Room 210 #12
Poster – In Tue Poster Session B
Zhouyuan Huo · Bin Gu · Heng Huang

Faster Neural Networks Straight from JPEG

Tue Dec 4th 05:00 – 07:00 PM @ Room 210 #13
Poster – In Tue Poster Session B
Lionel Gueguen · Alex Sergeev · Ben Kadlec · Rosanne Liu · Jason
Yosinski

Hierarchical Graph Representation Learning with Differentiable
Pooling

Tue Dec 4th 05:00 – 07:00 PM @ Room 210 #14
Poster – In Tue Poster Session B
Zhitao Ying · Jiaxuan You · Christopher Morris · Xiang Ren · Will
Hamilton · Jure Leskovec

Bayesian Model-Agnostic Meta-Learning

Tue Dec 4th 05:00 – 07:00 PM @ Room 210 #15
Poster – In Tue Poster Session B
Jaesik Yoon · Taesup Kim · Ousmane Dia · Sungwoong Kim · Yoshua
Bengio · Sungjin Ahn

Evolved Policy Gradients

Tue Dec 4th 05:00 – 07:00 PM @ Room 210 #16
Poster – In Tue Poster Session B
Rein Houthooft · Yuhua Chen · Phillip Isola · Bradly Stadie · Filip
Wolski · OpenAI Jonathan Ho · Pieter Abbeel

BourGAN: Generative Networks with Metric Embeddings

Tue Dec 4th 05:00 – 07:00 PM @ Room 210 #17
Poster – In Tue Poster Session B
Chang Xiao · Peilin Zhong · Changxi Zheng

Scalable End-to-End Autonomous Vehicle Testing via Rare-event
Simulation

Tue Dec 4th 05:00 – 07:00 PM @ Room 210 #18
Poster – In Tue Poster Session B
Matthew O'Kelly · Aman Sinha · Hongseok Namkoong · Russ
Tedrake · John Duchi

Generalisation of structural knowledge in the
hippocampal-entorhinal system

Tue Dec 4th 05:00 – 07:00 PM @ Room 210 #19
Poster – In Tue Poster Session B
James Whittington · Timothy Muller · Shirely Mark · Caswell Barry
· Tim Behrens

Task-Driven Convolutional Recurrent Models of the Visual System

Tue Dec 4th 05:00 – 07:00 PM @ Room 210 #20
Poster – In Tue Poster Session B
Aran Nayebi · Daniel Bear · Jonas Kubilius · Kohitij Kar · Surya
Ganguli · David Sussillo · James J DiCarlo · Daniel Yamins

Neural-Symbolic VQA: Disentangling Reasoning from Vision and
Language Understanding

Tue Dec 4th 05:00 – 07:00 PM @ Room 210 #21
Poster – In Tue Poster Session B
Kexin Yi · Jiajun Wu · Chuang Gan · Antonio Torralba · Pushmeet
Kohli · Josh Tenenbaum

Extracting Relationships by Multi-Domain Matching

Tue Dec 4th 05:00 – 07:00 PM @ Room 210 #22
Poster – In Tue Poster Session B
Yitong Li · michael Murias · geraldine Dawson · David Carlson

Sparse Attentive Backtracking: Temporal Credit Assignment
Through Reminding

Tue Dec 4th 05:00 – 07:00 PM @ Room 210 #23
Poster – In Tue Poster Session B
Nan Rosemary Ke · Anirudh Goyal ALIAS PARTH GOYAL · Olexa
Bilaniuk · Jonathan Binas · Michael Mozer · Chris Pal · Yoshua
Bengio

Beauty-in-averageness and its contextual modulations: A
Bayesian statistical account

Tue Dec 4th 05:00 – 07:00 PM @ Room 210 #24
Poster – In Tue Poster Session B
Chaitanya Ryali · Angela J Yu

Stimulus domain transfer in recurrent models for large scale
cortical population prediction on video

Tue Dec 4th 05:00 – 07:00 PM @ Room 210 #25
Poster – In Tue Poster Session B
Fabian Sinz · Alexander Ecker · Paul Fahey · Edgar Walker · Er-
ick Cobos · Emmanouil Froudarakis · Dimitri Yatsenko · Zachary
Pitkow · Jacob Reimer · Andreas Tolias

A probabilistic population code based on neural samples

Tue Dec 4th 05:00 – 07:00 PM @ Room 210 #26
Poster – In Tue Poster Session B
Sabyasachi Shivkumar · Richard Lange · Ankani Chattoraj · Ralf
Haefner

cpSGD: Communication-efficient and differentially-private
distributed SGD

Tue Dec 4th 05:00 – 07:00 PM @ Room 210 #27
Poster – In Tue Poster Session B
Naman Agarwal · Ananda Theertha Suresh · Felix Xinnan Yu ·
Sanjiv Kumar · Brendan McMahan

Bounded-Loss Private Prediction Markets

Tue Dec 4th 05:00 – 07:00 PM @ Room 210 #28
Poster – In Tue Poster Session B
Rafael Frongillo · Bo Waggoner

Ex ante coordination and collusion in zero-sum multi-player
extensive-form games

Tue Dec 4th 05:00 – 07:00 PM @ Room 210 #29
Poster – In Tue Poster Session B
Gabriele Farina · Andrea Celli · Nicola Gatti · Tuomas Sandholm

Model-Agnostic Private Learning

Tue Dec 4th 05:00 – 07:00 PM @ Room 210 #30
Poster – In Tue Poster Session B
Raef Bassily · Abhradeep Guha Thakurta · Om Dipakbhai Thakkar

Adversarially Robust Generalization Requires More Data

Tue Dec 4th 05:00 – 07:00 PM @ Room 210 #31
Poster – In Tue Poster Session B
Ludwig Schmidt · Shibani Santurkar · Dimitris Tsipras · Kunal Talwar · Aleksander Madry

Bayesian Pose Graph Optimization via Bingham Distributions and Tempered Geodesic MCMC

Tue Dec 4th 05:00 – 07:00 PM @ Room 210 #32
Poster – In Tue Poster Session B
Tolga Birdal · Umut Simsekli · Mustafa Onur Eken · Slobodan Ilic

A Statistical Recurrent Model on the Manifold of Symmetric Positive Definite Matrices

Tue Dec 4th 05:00 – 07:00 PM @ Room 210 #33
Poster – In Tue Poster Session B
Rudrasis Chakraborty · Chun-Hao Yang · Xingjian Zhen · Monami Banerjee · Derek Archer · David Vaillancourt · Vikas Singh · Baba Vemuri

Designing by Training: Acceleration Neural Network for Fast High-Dimensional Convolution

Tue Dec 4th 05:00 – 07:00 PM @ Room 210 #34
Poster – In Tue Poster Session B
Longquan Dai · Liang Tang · Yuan Xie · Jinhui Tang

Greedy Hash: Towards Fast Optimization for Accurate Hash Coding in CNN

Tue Dec 4th 05:00 – 07:00 PM @ Room 210 #35
Poster – In Tue Poster Session B
Shupeng Su · Chao Zhang · Kai Han · Yonghong Tian

Generative Probabilistic Novelty Detection with Adversarial Autoencoders

Tue Dec 4th 05:00 – 07:00 PM @ Room 210 #36
Poster – In Tue Poster Session B
Stanislav Pidhorskyi · Ranya Almohsen · Gianfranco Doretto

Joint Sub-bands Learning with Clique Structures for Wavelet Domain Super-Resolution

Tue Dec 4th 05:00 – 07:00 PM @ Room 210 #37
Poster – In Tue Poster Session B
Zhisheng Zhong · Tiancheng Shen · Yibo Yang · Zhouchen Lin · Chao Zhang

Compact Generalized Non-local Network

Tue Dec 4th 05:00 – 07:00 PM @ Room 210 #38
Poster – In Tue Poster Session B
Kaiyu Yue · Ming Sun · Yuchen Yuan · Feng Zhou · Errui Ding · Fuxin Xu

BinGAN: Learning Compact Binary Descriptors with a Regularized GAN

Tue Dec 4th 05:00 – 07:00 PM @ Room 210 #39
Poster – In Tue Poster Session B
Maciej Zieba · Piotr Semberecki · Tarek El-Gaaly · Tomasz Trzcinski

RenderNet: A deep convolutional network for differentiable rendering from 3D shapes

Tue Dec 4th 05:00 – 07:00 PM @ Room 210 #40
Poster – In Tue Poster Session B
Thu H Nguyen-Phuoc · Chuan Li · Stephen Balaban · Yongliang Yang

LF-Net: Learning Local Features from Images

Tue Dec 4th 05:00 – 07:00 PM @ Room 210 #41
Poster – In Tue Poster Session B
Yuki Ono · Eduard Trulls · Pascal Fua · Kwang Moo Yi

Unsupervised Learning of Shape and Pose with Differentiable Point Clouds

Tue Dec 4th 05:00 – 07:00 PM @ Room 210 #42
Poster – In Tue Poster Session B
Eldar Insafutdinov · Alexey Dosovitskiy

Modelling and unsupervised learning of symmetric deformable object categories

Tue Dec 4th 05:00 – 07:00 PM @ Room 210 #43
Poster – In Tue Poster Session B
James Thewlis · Hakan Bilen · Andrea Vedaldi

Multi-View Silhouette and Depth Decomposition for High Resolution 3D Object Representation

Tue Dec 4th 05:00 – 07:00 PM @ Room 210 #44
Poster – In Tue Poster Session B
Edward Smith · Scott Fujimoto · David Meger

Image Inpainting via Generative Multi-column Convolutional Neural Networks

Tue Dec 4th 05:00 – 07:00 PM @ Room 210 #45
Poster – In Tue Poster Session B
Yi Wang · Xin Tao · Xiaojuan Qi · Xiaoyong Shen · Jiaya Jia

Beyond Grids: Learning Graph Representations for Visual Recognition

Tue Dec 4th 05:00 – 07:00 PM @ Room 210 #46
Poster – In Tue Poster Session B
Yin Li · Abhinav Gupta

Foreground Clustering for Joint Segmentation and Localization in Videos and Images

Tue Dec 4th 05:00 – 07:00 PM @ Room 210 #47
Poster – In Tue Poster Session B
Abhishek Sharma

LinkNet: Relational Embedding for Scene Graph

Tue Dec 4th 05:00 – 07:00 PM @ Room 210 #48
Poster – In Tue Poster Session B
Sanghyun Woo · Dahun Kim · Donghyeon Cho · In So Kweon

Context-aware Synthesis and Placement of Object Instances

Tue Dec 4th 05:00 – 07:00 PM @ Room 210 #49
Poster – In Tue Poster Session B
Donghoon Lee · Ming-Yu Liu · Ming-Hsuan Yang · Sifei Liu · Jinwei Gu · Jan Kautz

Geometry-Aware Recurrent Neural Networks for Active Visual Recognition

Tue Dec 4th 05:00 – 07:00 PM @ Room 210 #50
Poster – In Tue Poster Session B
Ricson Cheng · Ziyan Wang · Katerina Fragkiadaki

See and Think: Disentangling Semantic Scene Completion

Tue Dec 4th 05:00 – 07:00 PM @ Room 210 #51
Poster – In Tue Poster Session B
Shice Liu · YU HU · Yiming Zeng · Qiankun Tang · Beibei Jin · Yinhe Han · Xiaowei Li

Active Matting

Tue Dec 4th 05:00 – 07:00 PM @ Room 210 #52
Poster – In Tue Poster Session B
Xin Yang · Ke Xu · Shaozhe Chen · Shengfeng He · Baocai Yin Yin · Rynson Lau

A Unified Feature Disentangler for Multi-Domain Image Translation and Manipulation

Tue Dec 4th 05:00 – 07:00 PM @ Room 210 #53
Poster – In Tue Poster Session B
Alexander H. Liu · Yen-Cheng Liu · Yu-Ying Yeh · Yu-Chiang Frank Wang

Turbo Learning for CaptionBot and DrawingBot

Tue Dec 4th 05:00 – 07:00 PM @ Room 210 #54
Poster – In Tue Poster Session B
Qiuyuan Huang · Pengchuan Zhang · Dapeng Wu · Lei Zhang

Dialog-based Interactive Image Retrieval

Tue Dec 4th 05:00 – 07:00 PM @ Room 210 #55
Poster – In Tue Poster Session B
Xiaoxiao Guo · Hui Wu · Yu Cheng · Steven Rennie · Gerald Tesauro · Rogerio Feris

Hybrid Retrieval-Generation Reinforced Agent for Medical Image Report Generation

Tue Dec 4th 05:00 – 07:00 PM @ Room 210 #56
Poster – In Tue Poster Session B
Yuan Li · Xiaodan Liang · Zhiting Hu · Eric Xing

Sequential Context Encoding for Duplicate Removal

Tue Dec 4th 05:00 – 07:00 PM @ Room 210 #57
Poster – In Tue Poster Session B
Lu Qi · Shu Liu · Jianping Shi · Jiaya Jia

Hybrid Knowledge Routed Modules for Large-scale Object Detection

Tue Dec 4th 05:00 – 07:00 PM @ Room 210 #58
Poster – In Tue Poster Session B
ChenHan Jiang · Hang Xu · Xiaodan Liang · Liang Lin

SNIPER: Efficient Multi-Scale Training

Tue Dec 4th 05:00 – 07:00 PM @ Room 210 #59
Poster – In Tue Poster Session B
Bharat Singh · Mahyar Najibi · Larry Davis

Revisiting Multi-Task Learning with ROCK: a Deep Residual Auxiliary Block for Visual Detection

Tue Dec 4th 05:00 – 07:00 PM @ Room 210 #60
Poster – In Tue Poster Session B
Taylor Mordan · Nicolas THOME · Gilles Henaff · Matthieu Cord

MetaAnchor: Learning to Detect Objects with Customized Anchors

Tue Dec 4th 05:00 – 07:00 PM @ Room 210 #61
Poster – In Tue Poster Session B
Tong Yang · Xiangyu Zhang · Zeming Li · Wenqiang Zhang · Jian Sun

Learning Hierarchical Semantic Image Manipulation through Structured Representations

Tue Dec 4th 05:00 – 07:00 PM @ Room 210 #62
Poster – In Tue Poster Session B
Seunghoon Hong · Xinchen Yan · Thomas Huang · Honglak Lee

Cooperative Holistic Scene Understanding: Unifying 3D Object, Layout, and Camera Pose Estimation

Tue Dec 4th 05:00 – 07:00 PM @ Room 210 #63
Poster – In Tue Poster Session B
Siyuan Huang · Siyuan Qi · Yinxue Xiao · Yixin Zhu · Ying Nian Wu · Song-Chun Zhu

3D-Aware Scene Manipulation via Inverse Graphics

Tue Dec 4th 05:00 – 07:00 PM @ Room 210 #64
Poster – In Tue Poster Session B
Shunyu Yao · Tzu Ming Hsu · Jun-Yan Zhu · Jiajun Wu · Antonio Torralba · Bill Freeman · Josh Tenenbaum

FD-GAN: Pose-guided Feature Distilling GAN for Robust Person Re-identification

Tue Dec 4th 05:00 – 07:00 PM @ Room 210 #65
Poster – In Tue Poster Session B
Yixiao Ge · Zhuowan Li · Haiyu Zhao · Guojun Yin · Shuai Yi · Xiaogang Wang · hongsheng Li

Sequence-to-Segment Networks for Segment Detection

Tue Dec 4th 05:00 – 07:00 PM @ Room 210 #66
Poster – In Tue Poster Session B
Zijun Wei · Boyu Wang · Minh Hoai Nguyen · Jianming Zhang · Zhe Lin · Xiaohui Shen · Radomir Mech · Dimitris Samaras

Stacked Semantics-Guided Attention Model for Fine-Grained Zero-Shot Learning

Tue Dec 4th 05:00 – 07:00 PM @ Room 210 #67
Poster – In Tue Poster Session B
yunlong yu · Zhong Ji · Yanwei Fu · Jichang Guo · Yanwei Pang · Zhongfei (Mark) Zhang

DeepExposure: Learning to Expose Photos with Asynchronously Reinforced Adversarial Learning

Tue Dec 4th 05:00 – 07:00 PM @ Room 210 #68
Poster – In Tue Poster Session B
Runsheng Yu · Wenyu Liu · Yasen Zhang · Zhi Qu · Deli Zhao · Bo Zhang

Self-Erasing Network for Integral Object Attention

Tue Dec 4th 05:00 – 07:00 PM @ Room 210 #69
Poster – In Tue Poster Session B
Qibin Hou · PengTao Jiang · Yunchao Wei · Ming-Ming Cheng

Searching for Efficient Multi-Scale Architectures for Dense Image Prediction

Tue Dec 4th 05:00 – 07:00 PM @ Room 210 #70
Poster – In Tue Poster Session B
Maxwell Collins · Maxwell Collins · Yukun Zhu · George Papandreou · Barret Zoph · Florian Schroff · Bo Chen · Jon Shlens

DifNet: Semantic Segmentation by Diffusion Networks

Tue Dec 4th 05:00 – 07:00 PM @ Room 210 #71
Poster – In Tue Poster Session B
Peng Jiang · Fanglin Gu · Yunhai Wang · Changhe Tu · Baoquan Chen

Learning a High Fidelity Pose Invariant Model for High-resolution Face Frontalization

Tue Dec 4th 05:00 – 07:00 PM @ Room 210 #72
Poster – In Tue Poster Session B
Jie Cao · Yibo Hu · Hongwen Zhang · Ran He · Zhenan Sun

Attention in Convolutional LSTM for Gesture Recognition

Tue Dec 4th 05:00 – 07:00 PM @ Room 210 #73
Poster – In Tue Poster Session B
Liang Zhang · Guangming Zhu · Lin Mei · Peiyi Shen · Syed Afaq Ali Shah · Mohammed Bennamoun

Partially-Supervised Image Captioning

Tue Dec 4th 05:00 – 07:00 PM @ Room 210 #74
Poster – In Tue Poster Session B
Peter Anderson · Stephen Gould · Mark Johnson

Learning to Specialize with Knowledge Distillation for Visual Question Answering

Tue Dec 4th 05:00 – 07:00 PM @ Room 210 #75
Poster – In Tue Poster Session B
Jonghwan Mun · Kimin Lee · Jinwoo Shin · Bohyung Han

Chain of Reasoning for Visual Question Answering

Tue Dec 4th 05:00 – 07:00 PM @ Room 210 #76
Poster – In Tue Poster Session B
Chenfei Wu · Jinlai Liu · Xiaojie Wang · Xuan Dong

Learning Conditioned Graph Structures for Interpretable Visual Question Answering

Tue Dec 4th 05:00 – 07:00 PM @ Room 210 #77
Poster – In Tue Poster Session B
Will Norcliffe-Brown · Stathis Vafeias · Sarah Parisot

Out of the Box: Reasoning with Graph Convolution Nets for Factual Visual Question Answering

Tue Dec 4th 05:00 – 07:00 PM @ Room 210 #78
Poster – In Tue Poster Session B
Medhini Narasimhan · Svetlana Lazebnik · Alexander Schwing

Overcoming Language Priors in Visual Question Answering with Adversarial Regularization

Tue Dec 4th 05:00 – 07:00 PM @ Room 210 #79
Poster – In Tue Poster Session B
Sainandan Ramakrishnan · Aishwarya Agrawal · Stefan Lee

Non-Local Recurrent Network for Image Restoration

Tue Dec 4th 05:00 – 07:00 PM @ Room 210 #80
Poster – In Tue Poster Session B
Ding Liu · Bihan Wen · Yuchen Fan · Chen Change Loy · Thomas Huang

Neural Nearest Neighbors Networks

Tue Dec 4th 05:00 – 07:00 PM @ Room 210 #81
Poster – In Tue Poster Session B
Tobias Pl?tz · Stefan Roth

Training deep learning based denoisers without ground truth data

Tue Dec 4th 05:00 – 07:00 PM @ Room 210 #82
Poster – In Tue Poster Session B
Shakarim Soltanayev · Se Young Chun

Adversarial Regularizers in Inverse Problems

Tue Dec 4th 05:00 – 07:00 PM @ Room 210 #83
Poster – In Tue Poster Session B
Sebastian Lunz · Carola Schoenlieb · Ozan ?ktem

Densely Connected Attention Propagation for Reading Comprehension

Tue Dec 4th 05:00 – 07:00 PM @ Room 210 #84
Poster – In Tue Poster Session B
Yi Tay · Anh Tuan Luu · Siu Cheung Hui · Jian Su

Layer-Wise Coordination between Encoder and Decoder for Neural Machine Translation

Tue Dec 4th 05:00 – 07:00 PM @ Room 210 #85
Poster – In Tue Poster Session B
Tianyu He · Xu Tan · Yingce Xia · Di He · Tao Qin · Zhibo Chen · Tie-Yan Liu

e-SNLI: Natural Language Inference with Natural Language Explanations

Tue Dec 4th 05:00 – 07:00 PM @ Room 210 #86
Poster – In Tue Poster Session B
Oana-Maria Camburu · Tim Rockt?schel · Thomas Lukasiewicz · Phil Blunsom

The challenge of realistic music generation: modelling raw audio at scale

Tue Dec 4th 05:00 – 07:00 PM @ Room 210 #87
Poster – In Tue Poster Session B
Sander Dieleman · Aaron van den Oord · Karen Simonyan

Fully Neural Network Based Speech Recognition on Mobile and Embedded Devices

Tue Dec 4th 05:00 – 07:00 PM @ Room 210 #88
Poster – In Tue Poster Session B
Jinhwan Park · Yoonho Boo · Iksoo Choi · Sungho Shin · Wonyong Sung

Transfer Learning from Speaker Verification to Multispeaker Text-To-Speech Synthesis

Tue Dec 4th 05:00 – 07:00 PM @ Room 210 #89
Poster – In Tue Poster Session B
Ye Jia · Yu Zhang · Ron Weiss · Quan Wang · Jonathan Shen · Fei Ren · zhifeng Chen · Patrick Nguyen · Ruoming Pang · Ignacio Lopez Moreno · Yonghui Wu

SING: Symbol-to-Instrument Neural Generator

Tue Dec 4th 05:00 – 07:00 PM @ Room 210 #90
Poster – In Tue Poster Session B
Alexandre Defossez · Neil Zeghidour · Nicolas Usunier · Leon Bottou · Francis Bach

Neural Voice Cloning with a Few Samples

Tue Dec 4th 05:00 – 07:00 PM @ Room 210 #91
Poster – In Tue Poster Session B
Sercan Arik · Jitong Chen · Kainan Peng · Wei Ping · Yanqi Zhou

GroupReduce: Block-Wise Low-Rank Approximation for Neural Language Model Shrinking

Tue Dec 4th 05:00 – 07:00 PM @ Room 210 #92
Poster – In Tue Poster Session B
Patrick Chen · Si Si · Yang Li · Ciprian Chelba · Cho-Jui Hsieh

Dialog-to-Action: Conversational Question Answering Over a Large-Scale Knowledge Base

Tue Dec 4th 05:00 – 07:00 PM @ Room 210 #93
Poster – In Tue Poster Session B
Daya Guo · Duyu Tang · Nan Duan · Ming Zhou · Jian Yin

Generating Informative and Diverse Conversational Responses via Adversarial Information Maximization

Tue Dec 4th 05:00 – 07:00 PM @ Room 210 #94
Poster – In Tue Poster Session B
Yizhe Zhang · Michel Galley · Jianfeng Gao · Zhe Gan · Xiujun Li · Chris Brockett · Bill Dolan

Answerer in Questioner's Mind: Information Theoretic Approach to Goal-Oriented Visual Dialog

Tue Dec 4th 05:00 – 07:00 PM @ Room 210 #95
Poster – In Tue Poster Session B
Sang-Woo Lee · Yu-Jung Heo · Byoung-Tak Zhang

Trajectory Convolution for Action Recognition

Tue Dec 4th 05:00 – 07:00 PM @ Room 210 #96
Poster – In Tue Poster Session B
Yue Zhao · Guneet Singh Dhillon · Dahua Lin

Video Prediction via Selective Sampling

Tue Dec 4th 05:00 – 07:00 PM @ Room 210 #97
Poster – In Tue Poster Session B
Jingwei Xu · Bingbing Ni · Xiaokang Yang

Unsupervised Learning of Artistic Styles with Archetypal Style Analysis

Tue Dec 4th 05:00 – 07:00 PM @ Room 210 #98
Poster – In Tue Poster Session B
Daan Wynen · Cordelia Schmid · Julien Mairal

Attacks Meet Interpretability: Attribute-steered Detection of Adversarial Samples

Tue Dec 4th 05:00 – 07:00 PM @ Room 210 #99
Poster – In Tue Poster Session B
Guanhong Tao · Shiqing Ma · Yingqi Liu · Xiangyu Zhang

Speaker-Follower Models for Vision-and-Language Navigation

Tue Dec 4th 05:00 – 07:00 PM @ Room 210 #100
Poster – In Tue Poster Session B
Daniel Fried · Ronghang Hu · Volkan Cirik · Anna Rohrbach · Jacob Andreas · Louis-Philippe Morency · Taylor Berg-Kirkpatrick · Kate Saenko · Dan Klein · Trevor Darrell

Neural Code Comprehension: A Learnable Representation of Code Semantics

Tue Dec 4th 05:00 – 07:00 PM @ Room 517 AB #101
Poster – In Tue Poster Session B
Tal Ben-Nun · Alice Shoshana Jakobovits · Torsten Hoefler

MiME: Multilevel Medical Embedding of Electronic Health
Records for Predictive Healthcare

Tue Dec 4th 05:00 – 07:00 PM @ Room 517 AB #102
Poster – In Tue Poster Session B
Edward Choi · Cao Xiao · Walter Stewart · Jimeng Sun

Distilled Wasserstein Learning for Word Embedding and Topic
Modeling

Tue Dec 4th 05:00 – 07:00 PM @ Room 517 AB #103
Poster – In Tue Poster Session B
Hongteng Xu · Wenlin Wang · Wei Liu · Lawrence Carin

Learning to Optimize Tensor Programs

Tue Dec 4th 05:00 – 07:00 PM @ Room 517 AB #104
Poster – In Tue Poster Session B
Tianqi Chen · Lianmin Zheng · Eddie Yan · Ziheng Jiang · Thierry
Moreau · Luis Ceze · Carlos Guestrin · Arvind Krishnamurthy

Learning to Solve SMT Formulas

Tue Dec 4th 05:00 – 07:00 PM @ Room 517 AB #105
Poster – In Tue Poster Session B
Mislav Balunovic · Pavol Bielik · Martin Vechev

Data center cooling using model-predictive control

Tue Dec 4th 05:00 – 07:00 PM @ Room 517 AB #106
Poster – In Tue Poster Session B
Nevena Lazic · Craig Boutilier · Tyler Lu · Eehern Wong · Binz Roy
· MK Ryu · Greg Imwalle

Bayesian Inference of Temporal Task Specifications from
Demonstrations

Tue Dec 4th 05:00 – 07:00 PM @ Room 517 AB #107
Poster – In Tue Poster Session B
Ankit Shah · Pritish Kamath · Julie A Shah · Shen Li

Training Deep Neural Networks with 8-bit Floating Point Numbers

Tue Dec 4th 05:00 – 07:00 PM @ Room 517 AB #108
Poster – In Tue Poster Session B
Naigang Wang · Jungwook Choi · Daniel Brand · Chia-Yu Chen ·
Kailash Gopalakrishnan

Snap ML: A Hierarchical Framework for Machine Learning

Tue Dec 4th 05:00 – 07:00 PM @ Room 517 AB #109
Poster – In Tue Poster Session B
Celestine D?nner · Thomas Parnell · Dimitrios Sarigiannis · Nikolas
Ioannou · Andreea Anghel · Gummadi Ravi · Madhusudanan Kan-
dasamy · Haralampos Pozidis

Learning filter widths of spectral decompositions with wavelets

Tue Dec 4th 05:00 – 07:00 PM @ Room 517 AB #110
Poster – In Tue Poster Session B
Haidar Khan · Bulent Yener

A Likelihood-Free Inference Framework for Population Genetic
Data using Exchangeable Neural Networks

Tue Dec 4th 05:00 – 07:00 PM @ Room 517 AB #111
Poster – In Tue Poster Session B
Jeffrey Chan · Valerio Perrone · Jeffrey Spence · Paul Jenkins · Sara
Mathieson · Yun Song

Latent Gaussian Activity Propagation: Using Smoothness and
Structure to Separate and Localize Sounds in Large Noisy
Environments

Tue Dec 4th 05:00 – 07:00 PM @ Room 517 AB #112
Poster – In Tue Poster Session B
Daniel Johnson · Daniel Gorelik · Ross E Mawhorter · Kyle Suver ·
Weiqing Gu · Steven Xing · Cody Gabriel · Peter Sankhagowit

Inferring Latent Velocities from Weather Radar Data using
Gaussian Processes

Tue Dec 4th 05:00 – 07:00 PM @ Room 517 AB #113
Poster – In Tue Poster Session B
Rico Angell · Daniel Sheldon

Bayesian Nonparametric Spectral Estimation

Tue Dec 4th 05:00 – 07:00 PM @ Room 517 AB #114
Poster – In Tue Poster Session B
Felipe Tobar

Learning a Warping Distance from Unlabeled Time Series Using
Sequence Autoencoders

Tue Dec 4th 05:00 – 07:00 PM @ Room 517 AB #115
Poster – In Tue Poster Session B
Abubakar Abid · James Zou

Precision and Recall for Time Series

Tue Dec 4th 05:00 – 07:00 PM @ Room 517 AB #116
Poster – In Tue Poster Session B
Nesime Tatbul · Tae Jun Lee · Stan Zdonik · Mejbah Alam · Justin
Gottschlich

Deep Generative Markov State Models

Tue Dec 4th 05:00 – 07:00 PM @ Room 517 AB #117
Poster – In Tue Poster Session B
Hao Wu · Andreas Mardt · Luca Pasquali · Frank Noe

Doubly Robust Bayesian Inference for Non-Stationary Streaming
Data with β-Divergences

Tue Dec 4th 05:00 – 07:00 PM @ Room 517 AB #118
Poster – In Tue Poster Session B
Jeremias Knoblauch · Jack E Jewson · Theodoros Damoulas

Regularization Learning Networks: Deep Learning for Tabular
Datasets

Tue Dec 4th 05:00 – 07:00 PM @ Room 517 AB #119
Poster – In Tue Poster Session B
Ira Shavitt · Eran Segal

Generative modeling for protein structures

Tue Dec 4th 05:00 – 07:00 PM @ Room 517 AB #120
Poster – In Tue Poster Session B
Namrata Anand · Possu Huang

Geometry Based Data Generation

Tue Dec 4th 05:00 – 07:00 PM @ Room 517 AB #121
Poster – In Tue Poster Session B
Ofir Lindenbaum · Jay Stanley · Guy Wolf · Smita Krishnaswamy

Learning Concave Conditional Likelihood Models for Improved
Analysis of Tandem Mass Spectra

Tue Dec 4th 05:00 – 07:00 PM @ Room 517 AB #122
Poster – In Tue Poster Session B
John T Halloran · David M Rocke

Generalizing Tree Probability Estimation via Bayesian Networks

Tue Dec 4th 05:00 – 07:00 PM @ Room 517 AB #123
Poster – In Tue Poster Session B
Cheng Zhang · Frederick A Matsen IV

Learning Temporal Point Processes via Reinforcement Learning

Tue Dec 4th 05:00 – 07:00 PM @ Room 517 AB #124
Poster – In Tue Poster Session B
Shuang Li · Shuai Xiao · Shixiang Zhu · Nan Du · Yao Xie · Le Song

Exponentially Weighted Imitation Learning for Batched
Historical Data

Tue Dec 4th 05:00 – 07:00 PM @ Room 517 AB #125
Poster – In Tue Poster Session B
Qing Wang · Jiechao Xiong · Lei Han · peng sun · Han Liu · Tong Zhang

Evidential Deep Learning to Quantify Classification Uncertainty

Tue Dec 4th 05:00 – 07:00 PM @ Room 517 AB #126
Poster – In Tue Poster Session B
Murat Sensoy · Lance Kaplan · Melih Kandemir

Explanations based on the Missing: Towards Contrastive Explanations with Pertinent Negatives

Tue Dec 4th 05:00 – 07:00 PM @ Room 517 AB #127
Poster – In Tue Poster Session B
Amit Dhurandhar · Pin-Yu Chen · Ronny Luss · Chun-Chen Tu · Paishun Ting · Karthikeyan Shanmugam · Payel Das

Towards Robust Interpretability with Self-Explaining Neural Networks

Tue Dec 4th 05:00 – 07:00 PM @ Room 517 AB #128
Poster – In Tue Poster Session B
David Alvarez Melis · Tommi Jaakkola

Model Agnostic Supervised Local Explanations

Tue Dec 4th 05:00 – 07:00 PM @ Room 517 AB #129
Poster – In Tue Poster Session B
Gregory Plumb · Denali Molitor · Ameet Talwalkar

To Trust Or Not To Trust A Classifier

Tue Dec 4th 05:00 – 07:00 PM @ Room 517 AB #130
Poster – In Tue Poster Session B
Heinrich Jiang · Been Kim · Melody Guan · Maya Gupta

Predict Responsibly: Improving Fairness and Accuracy by Learning to Defer

Tue Dec 4th 05:00 – 07:00 PM @ Room 517 AB #131
Poster – In Tue Poster Session B
David Madras · Toni Pitassi · Richard Zemel

Hunting for Discriminatory Proxies in Linear Regression Models

Tue Dec 4th 05:00 – 07:00 PM @ Room 517 AB #132
Poster – In Tue Poster Session B
Samuel Yeom · Anupam Datta · Matt Fredrikson

Empirical Risk Minimization Under Fairness Constraints

Tue Dec 4th 05:00 – 07:00 PM @ Room 517 AB #133
Poster – In Tue Poster Session B
Michele Donini · Luca Oneto · Shai Ben-David · John Shawe-Taylor · Massimiliano Pontil

Approximation algorithms for stochastic clustering

Tue Dec 4th 05:00 – 07:00 PM @ Room 517 AB #134
Poster – In Tue Poster Session B
David Harris · Shi Li · Aravind Srinivasan · Khoa Trinh · Thomas Pensyl

Re-evaluating evaluation

Tue Dec 4th 05:00 – 07:00 PM @ Room 517 AB #135
Poster – In Tue Poster Session B
David Balduzzi · Karl Tuyls · Julien Perolat · Thore Graepel

Does mitigating ML's impact disparity require treatment disparity?

Tue Dec 4th 05:00 – 07:00 PM @ Room 517 AB #136
Poster – In Tue Poster Session B
Zachary Lipton · Julian McAuley · Alexandra Chouldechova

Enhancing the Accuracy and Fairness of Human Decision Making

Tue Dec 4th 05:00 – 07:00 PM @ Room 517 AB #137
Poster – In Tue Poster Session B
Isabel Valera · Adish Singla · Manuel Gomez Rodriguez

The Price of Fair PCA: One Extra dimension

Tue Dec 4th 05:00 – 07:00 PM @ Room 517 AB #138
Poster – In Tue Poster Session B
Samira Samadi · Uthaipon Tantipongpipat · Jamie Morgenstern · Mohit Singh · Santosh Vempala

Practical Methods for Graph Two-Sample Testing

Tue Dec 4th 05:00 – 07:00 PM @ Room 517 AB #139
Poster – In Tue Poster Session B
Debarghya Ghoshdastidar · Ulrike von Luxburg

Topkapi: Parallel and Fast Sketches for Finding Top-K Frequent Elements

Tue Dec 4th 05:00 – 07:00 PM @ Room 517 AB #140
Poster – In Tue Poster Session B
Ankush Mandal · He Jiang · Anshumali Shrivastava · Vivek Sarkar

KDGAN: Knowledge Distillation with Generative Adversarial Networks

Tue Dec 4th 05:00 – 07:00 PM @ Room 517 AB #141
Poster – In Tue Poster Session B
Xiaojie Wang · Rui Zhang · Yu Sun · Jianzhong Qi

Modeling Dynamic Missingness of Implicit Feedback for Recommendation

Tue Dec 4th 05:00 – 07:00 PM @ Room 517 AB #142
Poster – In Tue Poster Session B
Menghan Wang · Mingming Gong · Xiaolin Zheng · Kun Zhang

Gamma-Poisson Dynamic Matrix Factorization Embedded with Metadata Influence

Tue Dec 4th 05:00 – 07:00 PM @ Room 517 AB #143
Poster – In Tue Poster Session B
Trong Dinh Thac Do · Longbing Cao

Non-metric Similarity Graphs for Maximum Inner Product Search

Tue Dec 4th 05:00 – 07:00 PM @ Room 517 AB #144
Poster – In Tue Poster Session B
Stanislav Morozov · Artem Babenko

Norm-Ranging LSH for Maximum Inner Product Search

Tue Dec 4th 05:00 – 07:00 PM @ Room 517 AB #145
Poster – In Tue Poster Session B
Xiao Yan · Jinfeng Li · Xinyan Dai · Hongzhi Chen · James Cheng

A Dual Framework for Low-rank Tensor Completion

Tue Dec 4th 05:00 – 07:00 PM @ Room 517 AB #146
Poster – In Tue Poster Session B
Madhav Nimishakavi · Pratik Kumar Jawanpuria · Bamdev Mishra

Low-Rank Tucker Decomposition of Large Tensors Using TensorSketch

Tue Dec 4th 05:00 – 07:00 PM @ Room 517 AB #147
Poster – In Tue Poster Session B
Osman Asif Malik · Stephen Becker

Dropping Symmetry for Fast Symmetric Nonnegative Matrix Factorization

Tue Dec 4th 05:00 – 07:00 PM @ Room 517 AB #148
Poster – In Tue Poster Session B
Zhihui Zhu · Xiao Li · Kai Liu · Qiuwei Li

Semidefinite relaxations for certifying robustness to adversarial examples

Tue Dec 4th 05:00 – 07:00 PM @ Room 517 AB #149
Poster – In Tue Poster Session B
Aditi Raghunathan · Jacob Steinhardt · Percy Liang

Privacy Amplification by Subsampling: Tight Analyses via Couplings and Divergences

Tue Dec 4th 05:00 – 07:00 PM @ Room 517 AB #150
Poster – In Tue Poster Session B
Borja Balle · Gilles Barthe · Marco Gaboardi

Differentially Private Testing of Identity and Closeness of Discrete Distributions

Tue Dec 4th 05:00 – 07:00 PM @ Room 517 AB #151
Poster – In Tue Poster Session B
Jayadev Acharya · Ziteng Sun · Huanyu Zhang

Differentially Private k-Means with Constant Multiplicative Error

Tue Dec 4th 05:00 – 07:00 PM @ Room 517 AB #152
Poster – In Tue Poster Session B
Uri Stemmer · Haim Kaplan

Local Differential Privacy for Evolving Data

Tue Dec 4th 05:00 – 07:00 PM @ Room 517 AB #153
Poster – In Tue Poster Session B
Matthew Joseph · Aaron Roth · Jonathan Ullman · Bo Waggoner

Adversarial Attacks on Stochastic Bandits

Tue Dec 4th 05:00 – 07:00 PM @ Room 517 AB #154
Poster – In Tue Poster Session B
Kwang-Sung Jun · Lihong Li · Yuzhe Ma · Jerry Zhu

Distributed Learning without Distress: Privacy-Preserving Empirical Risk Minimization

Tue Dec 4th 05:00 – 07:00 PM @ Room 517 AB #155
Poster – In Tue Poster Session B
Bargav Jayaraman · Lingxiao Wang · David Evans · Quanquan Gu

A Spectral View of Adversarially Robust Features

Tue Dec 4th 05:00 – 07:00 PM @ Room 517 AB #156
Poster – In Tue Poster Session B
Shivam Garg · Vatsal Sharan · Brian Zhang · Gregory Valiant

Efficient Formal Safety Analysis of Neural Networks

Tue Dec 4th 05:00 – 07:00 PM @ Room 517 AB #157
Poster – In Tue Poster Session B
Shiqi Wang · Kexin Pei · Justin Whitehouse · Junfeng Yang · Suman Jana

Contamination Attacks and Mitigation in Multi-Party Machine Learning

Tue Dec 4th 05:00 – 07:00 PM @ Room 517 AB #158
Poster – In Tue Poster Session B
Jamie Hayes · Olga Ohrimenko

Explaining Deep Learning Models -- A Bayesian Non-parametric Approach

Tue Dec 4th 05:00 – 07:00 PM @ Room 517 AB #159
Poster – In Tue Poster Session B
Wenbo Guo · Sui Huang · Yunzhe Tao · Xinyu Xing · Lin Lin

Data-Driven Clustering via Parameterized Lloyd's Families

Tue Dec 4th 05:00 – 07:00 PM @ Room 517 AB #160
Poster – In Tue Poster Session B
Maria-Florina Balcan · Travis Dick · Colin White

Manifold Structured Prediction

Tue Dec 4th 05:00 – 07:00 PM @ Room 517 AB #161
Poster – In Tue Poster Session B
Alessandro Rudi · Carlo Ciliberto · GianMaria Marconi · Lorenzo Rosasco

Loss Surfaces, Mode Connectivity, and Fast Ensembling of DNNs

Tue Dec 4th 05:00 – 07:00 PM @ Room 517 AB #162
Poster – In Tue Poster Session B
Timur Garipov · Pavel Izmailov · Dmitrii Podoprikhin · Dmitry Vetrov · Andrew Wilson

Masking: A New Perspective of Noisy Supervision

Tue Dec 4th 05:00 – 07:00 PM @ Room 517 AB #163
Poster – In Tue Poster Session B
Bo Han · Jiangchao Yao · Gang Niu · Mingyuan Zhou · Ivor Tsang · Ya Zhang · Masashi Sugiyama

Supervising Unsupervised Learning

Tue Dec 4th 05:00 – 07:00 PM @ Room 517 AB #164
Poster – In Tue Poster Session B
Vikas Garg · Adam Kalai

One-Shot Unsupervised Cross Domain Translation

Tue Dec 4th 05:00 – 07:00 PM @ Room 517 AB #165
Poster – In Tue Poster Session B
Sagie Benaim · Lior Wolf

Neural Architecture Search with Bayesian Optimisation and Optimal Transport

Tue Dec 4th 05:00 – 07:00 PM @ Room 517 AB #166
Poster – In Tue Poster Session B
Kirthevasan Kandasamy · Willie Neiswanger · Jeff Schneider · Barnabas Poczos · Eric Xing

Adapted Deep Embeddings: A Synthesis of Methods for k-Shot Inductive Transfer Learning

Tue Dec 4th 05:00 – 07:00 PM @ Room 517 AB #167
Poster – In Tue Poster Session B
Tyler Scott · Karl Ridgeway · Michael Mozer

Completing State Representations using Spectral Learning

Tue Dec 4th 05:00 – 07:00 PM @ Room 517 AB #168
Poster – In Tue Poster Session B
Nan Jiang · Alex Kulesza · Satinder Singh

Data-Efficient Hierarchical Reinforcement Learning

Tue Dec 4th 05:00 – 07:00 PM @ Room 517 AB #169
Poster – In Tue Poster Session B
Ofir Nachum · Shixiang (Shane) Gu · Honglak Lee · Sergey Levine

The Cluster Description Problem – Complexity Results, Formulations and Approximations

Tue Dec 4th 05:00 – 07:00 PM @ Room 517 AB #170
Poster – In Tue Poster Session B
Ian Davidson · Antoine Gourru · S Ravi

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