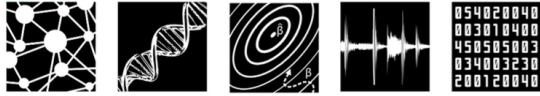


WiML

Women in Machine Learning



2016 • 11th Annual Workshop • Barcelona

Monday, December 5, 2016
Co-Located with NIPS

Welcome to WiML 2016!

We have an exciting lineup of talks, roundtables, and posters. This has been an unprecedented year, with more than double the number of submissions and attendees compared to last year. **Special thanks to our sponsors** - your support makes WiML 2016 possible!

In this book, you'll find: the schedule, talk abstracts, roundtable topics, and poster titles. FAQs are online [here](#), [here](#) and [here](#). This year, for the first time ever, **talks will be streamed live** via Twitter Periscope at <https://www.periscope.tv/wimlworkshop>. Our **poster session is also open to NIPS attendees**, so tell your friends!

Thank you for joining us this landmark year.
See you in Barcelona!

WiML 2016 Organizers

*Diana Cai, Deborah Hanus, Sarah Tan,
Isabel Valera & Rose Yu*

Connect with us, stay in touch

- Tweet [#WiML2016](#) and [@WiMLWorkshop](#)
- Join the [WiML network](#)
- Visit our [website](#) and [Facebook page](#)

Useful Info

- **Registration desk** open **Sunday 12-2pm** and **Monday 7-8am**, entry level of convention center (enter from **Entrance C**), next to NIPS registration. Beat the Monday line, pick up your badge on Sunday.
- Remember to return to the workshop room immediately after posters - we are **raffling off an Amazon Echo and Microsoft swag**.
- Look out for attendees with starred badges - they are our amazing speakers and mentors!
- Need help? Look for attendees wearing organizer/board member/volunteer badges.
- Interested in organizing WiML 2017? Watch out for call for organizers in January 2017.
- **WiFi** network [NIPS](#), password [conference](#)

Dinner attendees

Get seated sooner - pick up your badge before dinner, or print and bring your Eventbrite dinner ticket.

Poster presenters

- Posters for both rounds should be setup 1-1.40pm and removed 3.20-3.30pm. Each poster board is shared by 2-3 presenters. Check [page 14](#) for your round number and poster number. Look for that number in the poster room with 'W' appended to the front, e.g. W1, W2, etc.
- **Poster size:** up to 37.9 inches width and 35.8 inches height (or 96.3 cm x 91.0 cm), portrait or landscape.

Travel grant awardees

Reimbursement instructions will be emailed after the workshop, by Dec 30. You must pick up your badge, present your poster, and fill in the [survey](#) to receive your travel grant.

Table of Contents

Click entry to jump directly to page.

Schedule	3
Sunday, December 4	3
Monday, December 5	3
Location	5
Map and Directions	5
Convention Center Rooms	6
Talks	7
Invited Talks	7
WiML Updates	9
Contributed Talks	10
Research Roundtables	11
Career & Advice Roundtables	12
Poster Session	14
Round 1: 1.40pm - 2.30pm	14
Round 2: 2.30pm - 3:20pm	18
Sponsors	23
Gold Sponsor	23
Bronze Sponsor	24
Supporter	24
Committees	25
WiML Organization	26

[Special thanks to our sponsors.](#)

Your support makes WiML 2016 possible!

Schedule

Sunday, December 4

12 - 2pm	Registration desk open	Entrance Hall (enter from Entrance C)
2 - 4pm	Workshop on Effective Communication by Katherine Gorman of Talking Machines and Amazon (Optional)	Invitation-only, RSVP required
4 - 6pm	Amazon Panel & Networking (Optional)	Invitation-only, RSVP required
5pm - 7pm	Facebook Lean-In Circles (Optional)	Invitation-only, RSVP required
7.15 - 10pm	WiML Dinner (Optional)	Separate registration required Dedicated to Amazon
10 - 11.30pm	OpenAI Happy Hour (Optional)	Invitation-only, RSVP required

Monday, December 5

All events are held in Rooms 111 and 112, Level P1, except for the poster session, which takes place in Area 5+6+7+8, Level P0.

7 - 8am	Registration and Breakfast Dedicated to Microsoft and OpenAI <u>Registration desk</u> at Entrance Hall (enter from Entrance C) <u>Breakfast</u> in Rooms 111 and 112, Level P1
8 - 8.05am	Opening Remarks
8.05 - 8.40am	Invited Talk: Maya Gupta , Google Research Designing Algorithms for Practical Machine Learning
8.40 - 8.55am	Contributed Talk: Maithra Raghu , Cornell Univ / Google Brain On the Expressive Power of Deep Neural Networks
8.55 - 9.10am	Contributed Talk: Sara Magliacane , VU Univ Amsterdam Ancestral Causal Inference
9.10 - 9.15am	Break

9.15 - 10.15am	Research Roundtables (Coffee served until 9.40am) Dedicated to Apple and Facebook
10.15 - 10.50am	Invited Talk: Suchi Saria , John Hopkins Univ <i>Towards a Reasoning Engine for Individualizing Healthcare</i>
10.50 - 11.05am	Contributed Talk: Madalina Fiterau , Stanford Univ <i>Learning Representations from Time Series Data through Contextualized LSTMs</i>
11.05 - 11.10am	Break
11:10 - 11.25am	Contributed Talk: Konstantina Christakopoulou , Univ Minnesota <i>Towards Conversational Recommender Systems</i>
11.25am - 12pm	Invited Talk: Anima Anandkumar , Amazon / UC Irvine <i>Large-Scale Machine Learning through Spectral Methods: Theory & Practice</i>
12 - 1pm	Career & Advice Roundtables
1 - 1.30pm	Lunch and Poster Setup Dedicated to DeepMind and Google
1.30 - 3.30pm	Poster Session (Coffee served until 2pm) Dedicated to our Silver Sponsors: Capital One, D. E. Shaw, Intel, Twitter Open to WiML and NIPS attendees Area 5+6+7+8, Level P0 <u>Round 1:</u> 1.40pm - 2.30pm; <u>Round 2:</u> 2.30pm - 3.20pm <u>Poster Removal:</u> 3.20pm - 3.30pm
3.30 - 3.45pm	Raffle and <u>WiML Updates</u> : Tamara Broderick , MIT and Sinead Williamson , UT Austin
3.45 - 4pm	Contributed Talk: Amy Zhang , Facebook <i>Using Convolutional Neural Networks to Estimate Population Density from High Resolution Satellite Images</i>
4 - 4.35pm	Invited Talk: Jennifer Chayes , Microsoft Research <i>Graphons and Machine Learning: Estimation of Sparse Massive Networks</i>
4.35 - 4.40pm	Closing Remarks

NIPS Main Conference (NIPS registration required)

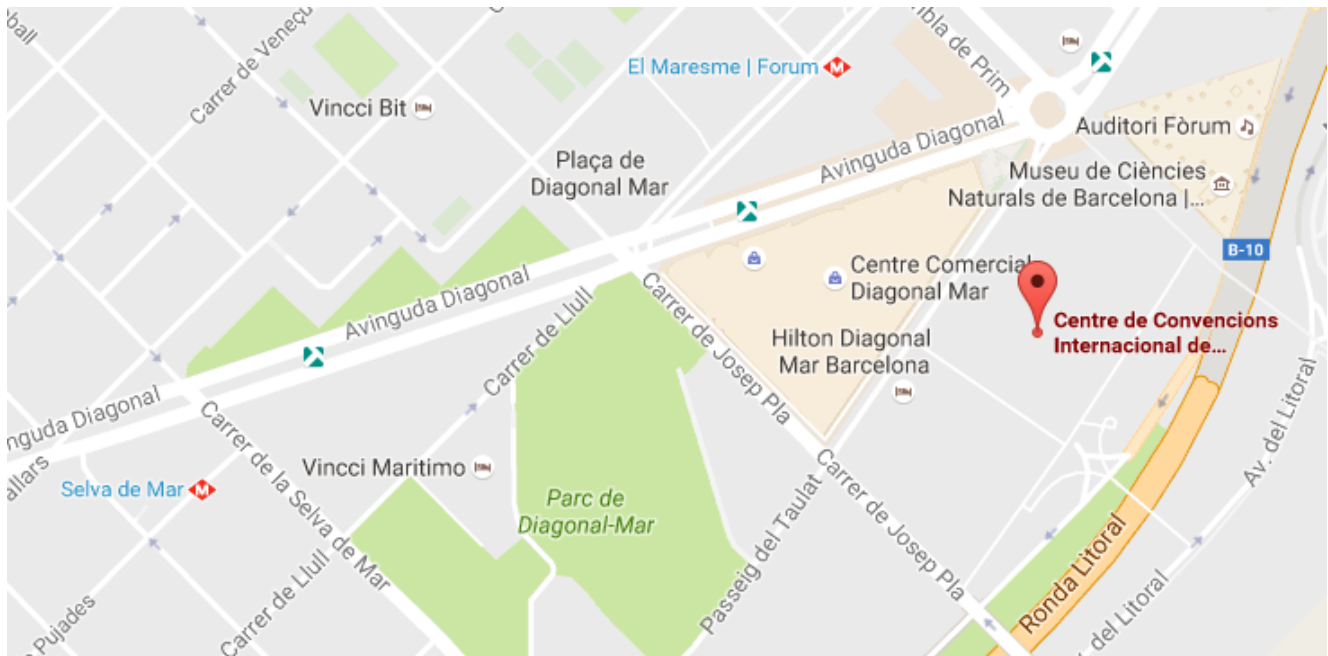
5pm NIPS Opening Remarks Area 1+2, Level P0

Location

Map and Directions

The workshop takes place in [Centre de Convencions Internacional Barcelona](https://goo.gl/maps/gW1BBI9ka6w), located at Plaça de Willy Brandt, 11-14, 08019 Barcelona, Spain. Directions to the convention center available at <https://goo.gl/maps/gW1BBI9ka6w>.

Sponsor events and the pre-workshop dinner are off-site.



Convention Center Rooms

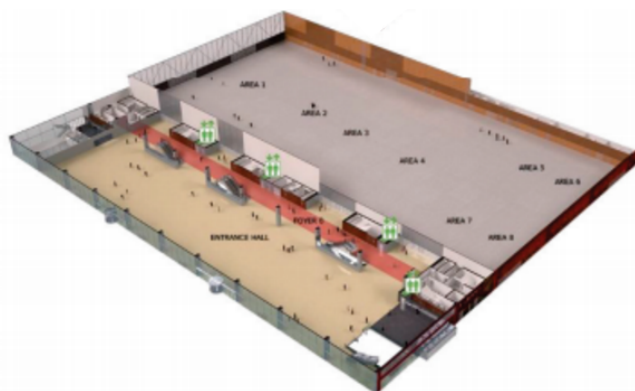
Workshop held in Rooms 111 and 112, Level P1.

Poster session takes place in Area 5+6+7+8, Level P0.

Registration desk

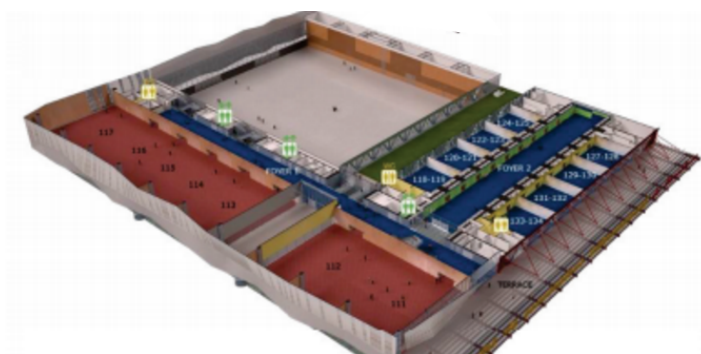
- Located at entry level of convention center (enter from **Entrance C**), next to NIPS registration.
 - Hours: **Sunday 12-2pm, Monday 7-8am.**
- Beat the Monday line, pick up your badge on Sunday.

P0 FLOOR



MULTI-PURPOSE ROOM TOTAL	11340 sqm
AREA 1	3476 sqm
AREA 2	1130 sqm
AREA 3	2175 sqm
AREA 4	1130 sqm
AREA 5	1133 sqm
AREA 6	568 sqm
AREA 7	1133 sqm
AREA 8	568 sqm
ENTRANCE HALL	3760 sqm
FOYER 0	790 sqm

P1 FLOOR



ROOM 111	420 sqm
ROOM 112	844 sqm
ROOM 113	430 sqm
ROOM 114	420 sqm
ROOM 115	420 sqm
ROOM 116	420 sqm
ROOM 117	878 sqm
ROOMS 118-134	16 ROOMS x 96 sqm
FOYER 1	1295 sqm
FOYER 2	1008 sqm

Talks

Invited Talks

Jennifer Chayes, Microsoft Research

Graphons and Machine Learning: Estimation of Sparse Massive Networks

Abstract: There are numerous examples of sparse massive networks, including the Internet, WWW and online social networks. How do we model and learn these networks? In contrast to conventional learning problems, where we have many independent samples, it is often the case for these networks that we can get only one independent sample. How do we use a single snapshot today to learn a model for the network, and hence predict a similar, but larger network in the future? In the case of relatively small or moderately sized networks, it's appropriate to model the network parametrically, and attempt to learn these parameters. For massive networks, a non-parametric representation is more appropriate. I review the theory of graph limits (graphons), developed over the last decade, to describe limits of dense graphs and, more recently, sparse graphs of unbounded degree, such as power-law graphs. I then show how to use these graphons to give consistent estimators of non-parametric models of sparse networks, and moreover how to do this in a way that protects the privacy of individuals on the network.

Bio: Jennifer Tour Chayes is Distinguished Scientist, Managing Director and Cofounder of Microsoft Research New England and Microsoft Research New York City. Before joining Microsoft in 1997, Chayes was for many years Professor of Mathematics at UCLA. Chayes is the author of over 130 academic papers and the inventor of over 30 patents. Her research areas include phase transitions in discrete mathematics and computer science, structural and dynamical properties of self-engineered networks, graph theory, graph algorithms, algorithmic game theory, and computational biology. Chayes is one of the inventors of the theory of graph limits, which is widely used for machine learning of massive networks. Chayes holds a BA in biology and physics from Wesleyan, where she graduated first in her class, and a PhD in mathematical physics from Princeton. She did postdoctoral work in the Mathematics and Physics Departments at Harvard and Cornell. She is the recipient of an NSF Postdoctoral Fellowship, a Sloan Fellowship, the UCLA Distinguished Teaching Award, and the ABI Women of Vision Leadership Award. She has twice been a member of the IAS in Princeton. Chayes is a Fellow of the American Association for the Advancement of Science, the Fields Institute, the Association for Computing Machinery, and the American Mathematical Society, and an Elected Member of the American Academy of Arts and Sciences. She is the winner of the 2015 John von Neumann Lecture Award, the highest honor of the Society of Industrial and Applied Mathematics. Chayes received an Honorary Doctorate from Leiden University in 2016.

Maya Gupta, Google Research

Designing Algorithms for Practical Machine Learning

Abstract: Machine learning is now widely used in industry, and more and more surprising real-world challenges are being discovered. I'll highlight a few of these open problems as well as some example solutions, focusing on interpretability, churn, efficiency, train/test sampling, and fairness.

Bio: Maya Gupta founded and runs the GlassBox Machine Learning R&D Group at Google, focusing on designing and delivering human-friendly machine learning solutions. Gupta joined Google Research in 2012. Before Google, Gupta was a professor at the University of Washington for ten years, after doing her PhD at Stanford University Bob Gray and Rob Tibshirani. She has also worked for Ricoh's California Research Lab, NATO's Undersea Research Center, Hewlett Packard R&D, and AT&T Labs, and founded and runs the jigsaw puzzle company Artifact Puzzles.

Anima Anandkumar, Amazon / UC Irvine

Large-Scale Machine Learning through Spectral Methods: Theory & Practice

Abstract: Most learning problems can be cast as optimization tasks which are non-convex. Developing fast and guaranteed approaches for solving non-convex problems is a grand challenge. I will show how spectral optimization can reach the globally optimal solution for many learning problems despite being non-convex. This includes unsupervised learning of latent variable models, training neural networks and reinforcement learning of partially observable Markov decision processes. It involve spectral decomposition of moment matrices and tensors. Tensors are rich structures that can encode higher order relationships in data. In practice, tensor methods yield enormous gains both in running times and learning accuracy over traditional methods such as variational inference. I will end the talk with ongoing efforts to run spectral methods at scale on AWS infrastructure.

Bio: Anima Anandkumar is a principal scientist at Amazon Web Services, and is currently on leave from UC Irvine, where she is an associate professor. Her research interests are in the areas of large-scale machine learning, non-convex optimization and high-dimensional statistics. In particular, she has been spearheading the development and analysis of tensor algorithms. She is the recipient of several awards such as the Alfred. P. Sloan Fellowship, Microsoft Faculty Fellowship, Google research award, ARO and AFOSR Young Investigator Awards, NSF CAREER Award, Early Career Excellence in Research Award at UCI, Best Thesis Award from the ACM SIGMETRICS society, IBM Fran Allen PhD fellowship and several best paper awards. She has been featured in a number of forums such as the Quora ML session, Huffington post, Forbes, O'Reilly media, and so on. She received her B.Tech in Electrical Engineering from IIT Madras in 2004 and her PhD from Cornell University in 2009. She was postdoctoral researcher at MIT from 2009 to 2010, an assistant professor at U.C. Irvine between 2010 and 2016, and a visiting researcher at Microsoft Research New England in 2012 and 2014.

Suchi Saria, John Hopkins Univ

Towards a Reasoning Engine for Individualizing Healthcare

Abstract: Healthcare is in the early stages of a digital revolution. In this talk, I will give my perspective on how advances in machine intelligence are likely to play a critical role in optimizing the delivery of healthcare. At its core, the fundamental computational challenges are to integrate the diversity of noisy measurements that are collected on an individual over time, and to provide estimates of the individual's future trajectory in order to facilitate decision making. I will describe one or two example directions where there is opportunity for exciting work. I'm also giving a tutorial later that day on this topic so you're welcome to join if interested (NIPS tutorial registration needed).

Bio: Suchi Saria is an assistant professor of computer science, health policy and statistics at Johns Hopkins University. Her research interests are in statistical machine learning and "precision" healthcare. Specifically, her focus is in designing novel data-driven computing tools for optimizing care delivery. Her work is being

used to drive electronic surveillance for reducing adverse events in the inpatient setting and to individualize disease management in complex, chronic diseases.

She received her PhD from Stanford University with Prof. Daphne Koller. Her work has received recognition in the form of two cover articles in Science Translational Medicine (2010, 2015), paper awards by the the Association for Uncertainty in Artificial Intelligence (2007) and the American Medical Informatics Association (2011), an Annual Scientific Award by the Society of Critical Care Medicine (2014), a Rambus Fellowship (2004-2010), an NSF Computing Innovation fellowship (2011), and competitive awards from the Gordon and Betty Moore Foundation (2013), and Google Research (2014). In 2015, she was selected by the IEEE Intelligent Systems to the "AI's 10 to Watch" list. In 2016, she was selected as a DARPA Young Faculty awardee and to Popular Science's "Brilliant 10".

WiML Updates

Tamara Broderick, MIT

Bio: Tamara Broderick is the ITT Career Development Assistant Professor in the Department of Electrical Engineering and Computer Science at MIT. She is a member of the MIT Computer Science and Artificial Intelligence Laboratory (CSAIL), the Center for Statistics, and the Institute for Data, Systems, and Society (IDSS). She completed her Ph.D. in Statistics with Professor Michael I. Jordan at the University of California, Berkeley in 2014. Previously, she received an AB in Mathematics from Princeton University (2007), a Master of Advanced Study for completion of Part III of the Mathematical Tripos from the University of Cambridge (2008), an MPhil by research in Physics from the University of Cambridge (2009), and an MS in Computer Science from the University of California, Berkeley (2013). Her recent research has focused on developing and analyzing models for scalable Bayesian machine learning---especially Bayesian nonparametrics. She has been awarded the ISBA Lifetime Members Junior Researcher Award, the Savage Award (for an outstanding doctoral dissertation in Bayesian theory and methods), the Evelyn Fix Memorial Medal and Citation (for the Ph.D. student on the Berkeley campus showing the greatest promise in statistical research), the Berkeley Fellowship, an NSF Graduate Research Fellowship, and a Marshall Scholarship.

Sinead Williamson, UT Austin

Bio: Sinead Williamson is an Assistant Professor of Statistics at the University of Texas at Austin, in the IROM Department and the Division of Statistics and Scientific Computation. She obtained her PhD from the Computational and Biological Learning group at the University of Cambridge, and spent two years as a postdoc in the SAILING laboratory at Carnegie Mellon University. She is interested in nonparametric Bayesian methods for use in machine learning applications. The nonparametric Bayesian paradigm is an elegant and flexible approach for modeling complex data of unknown latent dimensionality. In particular, she is interested in dependent nonparametric processes — distributions over collections of measures indexed by values in some covariate space. Such models are appropriate for spatio-temporally variable data, and for sharing information between related tasks. She is also interested in the development of fast and scalable inference algorithms for Bayesian nonparametric models.

Contributed Talks

Talk abstracts available at <https://goo.gl/bZGOey>.

Konstantina Christakopoulou, Univ of Minnesota
Joint work with Filip Radlinski and Katja Hofmann

Towards Conversational Recommender Systems

Madalina Fiterau, Stanford Univ

Learning Representations from Time Series Data through Contextualized LSTMs

Sara Magliacane, VU Univ Amsterdam
Joint work with Tom Claassen and Joris Mooij

Ancestral Causal Inference

Maithra Raghu, Cornell Univ / Google Brain
Joint work with Ben Poole, Jon Kleinberg, Surya Ganguli and Jascha Sohl-Dickstein

On the Expressive Power of Deep Neural Networks

Amy Zhang, Facebook
Joint work with Xianming Liu, Tobias Tiecke and Andreas Gros

Using Convolutional Neural Networks to Estimate Population Density from High Resolution Satellite Images

Research Roundtables

9:15 am - 10:15 am

Table 1: Deep learning I

Katja Hofmann, Microsoft Research
Oriol Vinyals, DeepMind

Table 2: Deep learning II

Junli Gu, Tesla
Sergio Guadarrama, Google Research
Niv Sundaram, Intel

Table 3: Reinforcement learning

Emma Brunskill, Carnegie Mellon / Stanford
Yisong Yue, Caltech

Table 4: Bayesian methods I

Barbara Engelhardt, Princeton
Lamiae Azizi, University of Sydney

Table 5: Bayesian methods II

Ferenc Huszar, Twitter / Magic Pony

Table 6: Graphical models

Margaret Mitchell, Google Research
Danielle Belgrave, Imperial College London

Table 7: Learning theory

Cynthia Rush, Columbia University
Corinna Cortes, Google Research

Table 8: Statistical inference and estimation

Katherine M. Kinnaird, Brown University
Alessandra Tosi, Mind Foundry, Oxford

Table 9: Optimization

Anima Anandkumar, Amazon / UC Irvine
Puja Das, Apple

Table 10: Neuroscience

Irina Higgins, DeepMind
Jascha Sohl-Dickstein, Google Brain

Table 11: Robotics

Raia Hadsell, DeepMind
Julie Bernauer, NVIDIA

Table 12: Natural language processing I

Catherine Breslin, Amazon
Olivia Buzek, IBM Watson

Table 13: Natural language processing II

Pallika Kanani, Oracle Labs
Ana Peleteiro Ramallo, Zalando
Aline Villavicencio, Federal University of Rio Grande do Sul, Brazil

Table 14: Healthcare/biology applications

Tania Cerquitelli, Politecnico di Torino
Jennifer Healey, Intel

Table 15: Music applications

Luba Elliott, iambicai
Kat Ellis, Amazon Music
Emilia Gomez, Universitat Pompeu Fabra, Barcelona

Table 16: Social science applications

Allison Chaney, Princeton University
Isabel Valera, Max Planck Institute for Software Systems

Table 17: Fairness, accountability, transparency in machine learning

Sarah Bird, Microsoft
Ekaterina Kochmar, University of Cambridge

Table 18: Computational sustainability

Erin LeDell, H2O.ai
Jennifer Dy, Northeastern University

Table 19: Computer vision

Judy Hoffman, Stanford University
Manohar Paluri, Facebook

Table 20: Human-in-the-Loop Learning

Been Kim, Allen Institute for AI / Univ of Washington
Saleema Amershi, Microsoft Research

Career & Advice Roundtables

12:00 pm - 13:00 pm

Table 1: Machine Learning @Amazon: *Jumpstarting your career in industry*

Anima Anandkumar, Catherine Breslin, Enrica Maria Fillipi

Table 2: Careers@Apple

Meriko Borogove, Anh Nguyen

Table 3: Machine Learning @DeepMind: *Research in industry vs. academia*

Nando De Freitas, Viorica Patraucean, Kimberly Stachenfeld

Table 4: Machine Learning @Facebook:

Sponsorship vs. Mentorship Throughout Your Career

Angela Fan, Amy Zhang, Christy Sauper, Natalia Neverova, Manohar Paluri

Table 5: Machine Learning @Google:

Industrial Research and Academic Impact

Corinna Cortes, Google

Table 6: Machine Learning and Deep Learning @Microsoft

Christopher Bishop, Mir Rosenberg, Anusua Trivedi

Table 7: *Delivering phenomenal customer experiences with Machine Learning @Capital One*

Jennifer Hill, Marcie Apelt

Table 8: Networking I

Olivia Buzek, IBM Watson

Jennifer Healey, Intel

Table 9: Networking II

Pallika Kanani, Oracle Labs

Been Kim, Allen Institute for AI / Univ of Washington

Table 10: Work/Life Balance (academia)

Namrata Vaswani, Iowa State University

Beka Steorts, Duke University

Table 11: Work/Life Balance (industry) I

Yuanyuan Pao, Lyft

Antonio Penta, United Technologies Research Centre, Ireland

Table 12: Work/Life Balance (industry) II

Kat Ellis, Amazon Music

Puja Das, Apple

Table 13: Choosing between academia/industry I

Katherine M. Kinnaird, Brown University

Jascha Sohl-Dickstein, Google Brain

Table 14: Choosing between academia/industry II

Sarah Bird, Microsoft

Oriol Vinyals, DeepMind

Table 15: Life with Kids

Jenn Wortman Vaughan, Microsoft Research

Julie Bernauer, NVIDIA

Table 16: Getting a job (academia) I

Jennifer Chayes, Microsoft Research

Yisong Yue, Caltech

Table 17: Getting a job (academia) II

Tamara Broderick, MIT

Cynthia Rush, Columbia University

Table 18: Getting a job (industry) I

Anne-Marie Tousch, Criteo

Sergio Guadarrama, Google Research

Table 19: Getting a job (industry) II

Margaret Mitchell, Google Research

Erin LeDell, H2O.ai

Table 20: Doing a postdoc

Cristina Savin, IST Austria / NYU

Judy Hoffman, Stanford University

Table 21: Doing research in industry

Junli Gu, Tesla

Samy Bengio, Google Brain

Table 22: Keeping up with academia while in industry
Irina Higgins, DeepMind
Alessandra Tosi, Mind Foundry, Oxford

Table 23: Surviving graduate school
Allison Chaney, Princeton University

Table 24: Seeking funding: fellowships and grants
Aline Villavicencio, Federal University of Rio Grande do Sul, Brazil
Danielle Belgrave, Imperial College London

Table 25: Establishing collaborations
Barbara Engelhardt, Princeton University
Ekaterina Kochmar, University of Cambridge

Table 26: Joining startups

Alyssa Frazee, Stripe
Ferenc Huszar, Twitter / Magic Pony

Table 27: Scientific communication
Katherine Gorman, Talking Machines
Ana Peleteiro Ramallo, Zalando

Table 28: Building your professional brand
Luba Elliott, iambicai
Lamiae Azizi, The University of Sydney

Table 29: Commercializing your research
Katherine Boyle, General Catalyst
Zehan Wang, Twitter / Magic Pony

Table 30: Long-term career planning
Inmar Givoni, Kindred.ai
Jennifer Dy, Northeastern University

Poster Session

1.30pm to 3:30pm, Area 5+6+7+8, Level P0

Open to WiML and NIPS attendees

200+ posters covering theory, methodology, and applications of machine learning will be presented in 2 rounds. Abstracts available at <https://goo.gl/bZGOey>. Abstracts listed here are for archival purposes and do not constitute proceedings for this workshop.

Instructions for Poster presenters

- Posters for both rounds should be setup 1-1.40pm and removed 3.20-3.30pm. Each poster board is shared by 2-3 presenters. Check below for your round number and poster number. Look for that number in the poster room with 'W' appended to the front, e.g. W1, W2, etc.
- **Poster size:** up to 37.9 inches width and 35.8 inches height (or 96.3 cm x 91.0 cm), portrait or landscape.

Round 1: 1.40pm - 2.30pm

1. **Konstantina Christakopoulou**, Filip Radlinski and Katja Hofmann. *Towards Conversational Recommender Systems*. *Contributed Talk*
2. **Madalina Fiterau**. *Learning representations from time series data through contextualized LSTMs*. *Contributed Talk*
3. **Sara Magliacane**, Tom Claassen and Joris Mooij. *Ancestral Causal Inference*. *Contributed Talk*
4. **Qinyi Zhang**, Sarah Filippi, Arthur Gretton and Dino Sejdinovic. *Large-Scale Kernel Methods for Independence Testing*
5. **Anjali Silva**, Steven Rothstein and Sanjeena Dang. *Model selection for clustered high-throughput genomic data via Poisson mixture models*
6. **Samira Ebrahimi Kahou**, Vincent Michalski, Roland Memisevic and Christopher Pal. *RATM: Recurrent Attentive Tracking Model*
7. **M Julia Flores**, R Martin Krug and Javier Lara Valtueña. *Supervised Classification to mate-in-one exercises aimed at chess training for beginners*
8. **Rūta Užupytė** and Tomas Krilavičius. *A clustering approach to electricity consumption profiles using smart meters data*
9. **Anastasia Podosinnikova**, Francis Bach and Simon Lacoste-Julien. *Beyond CCA: Moment Matching for Multi-View Models*
10. **Laura Morán-Fernández**. *A distributed feature selection method based on data complexity measures*
11. **Veronica Bolon Canedo**. *Beyond feature selection: an approach for reducing the cost of the features*
12. **Soukayna Mouatadid** and Jan Adamowski. *Forecasting short-term urban water demand using extreme learning machines*
13. **Elena Erdmann** and Kristian Kersting. *Topic Classification by Human Machine-Learning Interaction*
14. **Danielle Belgrave**, Raquel Granell, John Guiver, Christopher Bishop and Iain Buchan. *A Bayesian machine learning approach to latent variable modelling to accelerate endotype discovery*

15. **Lucy Yin**, Jennifer Andrews and Thomas Heaton. *Bayesian Approach to Real-time Earthquake Detection*
16. **Alexandra Gessner**, Michael Osborne, Roman Garnett and Philipp Hennig. *Fast Bayesian Quadrature with exact DPP sampling*
17. **Lidia Contreras-Ochando** and Cesar Ferri. *Wind-sensitive interpolation of urban air pollution forecasts*
18. **Míriam Bellver**, Xavier Giró I Nieto and Ferran Marqués. *Efficient search of objects in images using deep reinforcement learning*
19. **Beyza Ermis** and Taylan Cemgil. *Differentially Private MCMC Algorithms for Distributed Matrix Factorization*
20. **Claire Vernade**, Paul Lagrée and Olivier Cappé. *Multiple-Play Bandits in the Position-Based Model*
21. **Cynthia Rush** and Ramji Venkataramanan. *Finite Sample Analysis of Approximate Message Passing*
22. **Maria-Florina Balcan**, Ellen Vitercik and Colin White. *Learning Combinatorial Functions from Pairwise Comparisons*
23. **Leila Wehbe**, Anwar Nunez-Elizalde, Alex Huth, Fatma Imamoglu, Natalia Bilenko and Jack Gallant. *Deep multi-view representation learning of brain responses to natural stimuli*
24. **Yi Zhao** and Xi Luo. *Pathway Lasso: Estimate and Select Mediation Pathways with High Dimensional Mediators*
25. **Yijun Zhao**, Bilal Ahmed, Thomas Thesen, Karen Blackmon, Jennifer Dy and Carla E Brodley. *A Non-parametric Approach to Detect Epileptogenic Lesions using Restricted Boltzmann Machines*
26. **Shao-Yuan Li**, Yuan Jiang and Zhi-Hua Zhou. *Partial Multi-View Clustering*
27. **Anusua Trivedi**. *Re-Usability of Deep Learning Models - Transfer Learning and Fine-tuning across different domains*
28. Jörg Bornschein, Samira Shabanian, **Asja Fischer** and Yoshua Bengio. *Bidirectional Helmholtz Machines*
29. **Seong-Eun Moon** and Jong-Seok Lee. *Machine learning for brain imaging under perceptual experience of multimedia content*
30. **Jane Hung**, Deepali Ravel, Matthias Marti and Anne Carpenter. *Identifying Infected Blood Cells using R-CNN-based Object Detection*
31. **Corina Dima**. *On the Compositionality and Semantic Interpretation of English Noun Compounds*
32. **Wacha Bounliphone**. *A Test of Relative Similarity for Model Selection in Generative Models*
33. **Luana Bulat**, Douwe Kiela and Stephen Clark. *Vision and feature norms: inferring attributes of words from images using cross-modal maps*
34. **Zelda Mariet** and Suvrit Sra. *Kronecker Determinantal Point Processes*
35. **Maja Rudolph** and David Blei. *Exponential Family Embeddings*
36. **Liran Szlak**, Ohad Shamir and Jonathan Rosenski. *Multi-Player Bandits - a Musical Chairs Approach*
37. **Jiaqian Yu** and Matthew Blaschko. *Efficient Learning for Discriminative Segmentation with Supermodular Losses*
38. **Ekaterina Kochmar**. *Assessment of Lexical Knowledge Acquisition by Non-Native Speakers of English*
39. **Ariel Herbert-Voss**, Gregory A Ciccarelli, Thomas F Quatieri and Christopher J Smalt. *A biologically-informed deep learning approach to speech signal processing*
40. Remi Munos, Tom Stepleton, **Anna Harutyunyan** and Marc Bellemare. *Safe and Efficient Off-Policy Reinforcement Learning*
41. **Tatiana Shpakova** and Francis Bach. *Parameter Learning for Log-supermodular Distributions*
42. **Swabha Swayamdipta**, Miguel Ballesteros, Chris Dyer and Noah A Smith. *Multi-Task Learning for Incremental Parsing using Stack LSTMs*

43. **Fariba Yousefi**, Zhenwen Dai, Carl Henrik Ek and Neil Lawrence. *Unsupervised Learning with Imbalanced Data via Structure Consolidation Latent Variable Model*
44. **Aijan Ibraimova**, Michael Figurnov, Dmitry Vetrov and Pushmeet Kohli. *Combination of methods for acceleration of Convolutional Neural Networks*
45. **Anna Bethke**, Alexander Gude, Tiffany Jaya and Abhinav Ganesh. *Hermes: A Modular Recommender System Framework*
46. **Ji Hyun Bak**, Jung Yoon Choi, Athena Akrami, Ilana Witten and Jonathan Pillow. *Adaptive optimal training of animal behavior*
47. **Christina Lee**, Yihua Li, Devavrat Shah and Dogyoon Song. *Blind Regression: Nonparametric Regression for Latent Variable Models via Collaborative Filtering*
48. **Nidhi Gupta**, Ayan Seal, Pushpraj Bhatele and Pritee Khanna. *Selective Block Based Approach for Neoplasm Detection from T2-Weighted Brain MRIs*
49. **Kristina Preuer**, Günter Klambauer and Sepp Hochreiter. *Deep Learning for predicting synergy effects of drug combinations*
50. **Mariella Dimiccoli**, Haoyi Xu and Petia Radeva. *A cognitive-based model for event segmentation*
51. **Gintare Karolina Dziugaite**, Daniel Roy and Zoubin Ghahramani. *Neural Network Matrix Factorization*
52. **Bowei Yan** and Purnamrita Sarkar. *Convex Relaxation for Community Detection with Covariates*
53. **Lydia Liu**, Urun Dogan and Katja Hofmann. *Decoding multitask DQN in the world of Minecraft*
54. **Jessica Hamrick** and Thomas Griffiths. *Metareasoning and mental simulation*
55. **Manasi Vartak**. *ModelDB: A System for Machine Learning Model Management*
56. **Huihui Fan**, Finale Doshi-Velez and Luke Miratrix. *Promoting Domain-Specific Terms in Topic Models with Informative Priors*
57. **Jessica Verena Schulze**. *Functionally Informed Priors in a Bayesian Machine Learning Approach to Neuronal Connectivity Inference*
58. **Zita Marinho**, Shay B Cohen, Andre F T Martins and Noah A Smith. *Semi-Supervised Learning of Sequence Models with the Method of Moments*
59. **Diane Bouchacourt**, M Pawan Kumar and Sebastian Nowozin. *DISCO Nets : DISsimilarity COefficient Networks*
60. **Alejandrina Cristia** and Emmanuel Dupoux. *Learnability Differences in Child- versus Adult-Directed Speech: The Case of Unsupervised Pattern Discovery*
61. **Agnieszka Słowik**. *Analysis of projections defining probability distributions in random neural networks*
62. **Christina Heinze-Deml**, Brian McWilliams and Nicolai Meinshausen. *Preserving Differential Privacy Between Features in Distributed Estimation*
63. **Anastasia Ushakova** and Slava Mikhaylov. *Predicting energy customer vulnerability using smart meters data: a survey of methods and results*
64. **Imaculate Mosha**. *Dynamic Convex Hull Self Organising Map for the Travelling Salesman Problem*
65. **Baharan Mirzasoleiman**, Morteza Zadimoghaddam and Amin Karbasi. *Fast Distributed Submodular Cover: Public-Private Data Summarization*
66. **Eleni Triantafillou**, Jamie Ryan Kiros, Raquel Urtasun and Richard Zemel. *Towards Generalizable Sentence Embeddings*
67. **Barbara Plank**. *The side benefit of behavior: using keystroke dynamics to inform Natural Language Processing*
68. **Setareh Ariaifar**, Alican Bozkurt, Kivanc Kose, Junxiang Chen, Dana Brooks, Milind Rajadhyaksha and Jennifer Dy. *Network-SVM: Support Vector Machine for Network Data*
69. **Maria Herrero**. *Machine Learning in Pharmaceutical Science*

70. **Saerom Park**, Jaewook Lee, Kyoungok Kim and Huisu Jang. *Semi-supervised document embedding adjusting local structure for sentiment analysis*
71. **Delia Fernandez-Canellas**, Victor Campos, Xavier Giró Nieto, Brendan Jou and Shih-Fu Chang. *Is a happy dog image more happy than dog? - Analyzing Adjective and Noun Visual Contributions*
72. **Maria Carmela Padula**, Elisa Scariati, Marie Schaer, Maude Schneider, Dimitri Van De Ville and Stephan Eliez. *Predicting psychotic symptoms from DTI-based structural connectivity in patients with 22q11DS*
73. **Natasha Jaques**, Shane Gu, Richard Turner and Douglas Eck. *Generating Music by Fine Tuning Recurrent Neural Networks with Reinforcement Learning*
74. **Jauwairia Nasir**, Yong-Ho Yoo, Deok-Hwa Kim and Jong-Hwan Kim. *User preference-based Integrated Multi-memory Neural Model for Improving the Cognitive Abilities of Autonomous Robots*
75. **Angie Shen**, Benjamin Goldstein and Rebecca Steorts. *Dynamic Risk Prediction Models Used for Patient Deterioration*
76. **Ciara Pike-Burke**. *Optimistic Planning for the Stochastic Knapsack Problem*
77. **Andrea Barraza**. *Exploitation-Exploration Aware Diversification for Recommendation Systems*
78. **Viktoriia Krakovna** and Finale Doshi-Velez. *Increasing the Interpretability of Recurrent Neural Networks Using Hidden Markov Models*
79. **Xiaoyu Lu**, Hyunjik Kim, Seth Flaxman and Yee Whye Teh. *Tucker Gaussian Process for Regression and Collaborative Filtering*
80. **Marina Riabiz** and Simon Godsill. *Inference for CAR(p) -Stable Stochastic Processes via Poisson Series Approaches*
81. **Roberta de Vito**, Giovanni Parmigiani and Barbara Engelhardt. *Bayesian Multi-study Factor Analysis in High-dimensional Biological Data*
82. **Clara Higuera Cabañes**, Kathleen J Gardiner and Krzysztof J Cios. *Self Organizing Maps based approach for the identification of protein patterns related to learning and memory in control and mouse models of Down syndrome*
83. **Beatriz Remeseiro**. *On the effectiveness of feature selection in human tear film classification*
84. **Yousra Bekhti**, Daniel Strohmeier, Mainak Jas, Roland Badeau and Alexandre Gramfort. *M/EEG source localization with multi-scale time-frequency dictionaries*
85. **Lamiae Azizi**. *High dimensional spatio-temporal modelling for Brain cell types*
86. **Mihaela Porumb**. *Automatic extraction of relations between medical concepts in clinical documents*
Text Mining
87. **Alyssa Frazee**. *Fighting Credit Card Fraud with Machine Learning*
88. **Golnoosh Farnadi**. *User-Generated Content Data Fusion Framework Using Hinge-Loss Markov Random Fields*
89. **Brenda Betancourt**, Daniele Durante and Rebecca Steorts. *Random Shades of Colors: Multilayer clustering and community detection in networks*
90. **Shuai Li**, Baoxiang Wang, Shengyu Zhang and Wei Chen. *Contextual Combinatorial Cascading Bandits*
91. **Chelsea Finn** and Sergey Levine. *Deep Visual Foresight for Planning Robot Motion*
92. **Serena Yeung**. *Learning policies for training visual classifiers from noisy web data*
93. Elena Baralis, **Tania Cerquitelli**, Silvia Chiusano and Evelina Di Corso. *Towards Self-Learning Data Transformation*
94. **Gundula Povysil**, Djork-Arné Clevert and Sepp Hochreiter. *HapRFN: a deep learning method for identifying short IBD segments*
95. **Gulce Kale** and Oznur Tastan. *Early Diagnosis of Cancer from Volatile Organic Compounds*

96. **Sakinat Folorunso** and Adesesan Adeyemo. *Alleviating Classification Problem of Imbalanced Dataset*
97. **Mina Rezaei**, Haojin Yang and Christoph Meinel. *Brain tumor detection by deep convolutional neural network*
98. **Duygu Ozcelik** and Oznur Tastan. *A Weakly Supervised Clustering Method for Cancer Subgroup Identification*
99. **Stephanie Hyland** and Gunnar Ratsch. *Learning unitary operators with help from $u(n)$*
100. **Vanessa Gómez-Verdejo**, Sergio Muñoz-Romero and Jerónimo Arenas-García. *Regularized Multivariate Analysis Framework for Interpretable High-Dimensional Variable Selection*
101. **Farah Colchester**, Heloise Marais, Patrick Thomson and David Clifton. *Early warning prediction system for handpump failure*
102. **Iwona Sobieraj**. *Acoustic Event Detection in Real-life environments*
103. **Wiebke Koepp**, Sebastian Urban and Patrick van der Smagt. *A Novel Transfer Function for Continuous Interpolation between Summation and Multiplication in Neural Networks*
104. **Niranjani Prasad**, Barbara Engelhardt, Li-Fang Cheng, Corey Chivers, Michael Draugelis and Kai Li. *A Reinforcement Learning Approach to Weaning of Mechanical Ventilation in ICU*
105. **Nicole Mücke** and Gilles Blanchard. *Convergence rates of spectral methods for statistical inverse learning problems*
106. **Maria Francesca** and David Gregg. *Computing Convolution and Activation in the Frequency Domain*
107. **Anastasia Pentina** and Ruth Urner. *Lifelong Learning with Weighted Majority Votes*
108. **Cecília Nunes**, Anders Jonsson, Oscar Camara and Bart Bijmens. *A decision tree approach for imprecise data*
109. **Allison Chaney**, Young-Suk Lee, Olga Troyanskaya, David Blei and Barbara Engelhardt. *Generalized Nonparametric Deconvolution Models*
110. **Saadia Qamar**, Sana Ikram and Mehak Nadeem. *Human Computer Interface using EEG/EOG Signals*
111. **Yu-Hui Huang**, José Oramas, Tinne Tuytelaars and Luc Van Gool. *Do Motion Boundaries Improve Semantic Segmentation?*

Round 2: 2.30pm - 3:20pm

112. **Maithra Raghu**, Ben Poole, Jon Kleinberg, Surya Ganguli and Jascha Sohl-Dickstein. *On the expressive power of deep neural networks. **Contributed Talk***
113. **Amy Zhang**, Xianming Liu, Tobias Tiecke and Andreas Gros. *Using Convolutional Neural Networks to Estimate Population Density from High Resolution Satellite Images. **Contributed Talk***
114. **Yucen Luo**. *Conditional Generative Moment-Matching Networks*
115. **Kathryn Zimmerman** and David Field. *Visualizing the basis of classification in deep neural networks*
116. **Nasim Souly** and Roozbeh Zabihiollahi. *Story of life: story-extraction and summarization of personal photo albums using deep learning*
117. **Jialian Li**. *Temporal Conditional Moment Matching Deep Neural Networks*
118. **Luisa M Zintgraf**, Taco S Cohen, Tameem Adel and Max Welling. *Visualizing Deep Neural Network Decisions*
119. **Emily Denton**. *Semi-Supervised Learning with Context-Conditional Generative Adversarial Networks*
120. **Sara Taylor**, Natasha Jaques, Ehimwenma Nosakhare, Akane Sano and Rosalind Picard. *Multi-task Learning for Predicting Stress, Happiness, and Health*

121. **Timnit Gebru**, Jonathan Krause, Yilun Wang, Duyun Chen, Jia Deng and Fei-Fei Li. *Visual Census: Using Cars to Study People and Society*
122. **Michal Moshkovitz** and Naftali Tishby. *Information-Based Exploration for Reinforcement Learning*
123. **Ying Yang**, Robert Kass, Michael Tarr and Elissa Aminoff. *Understanding neural dynamics of human vision using convolutional neural networks*
124. **Clarissa Valim**, Rushdy Ahmad, Miguel Lanaspa, Yan Tan, Sozinho Acacio, Michael Gillette, Katherine Almendinger, Danny Milner, Lola Madrid, Karell Pelle, Jaroslaw Harezlak, Jacob Silterra, Pedro Alonso, Steven Carr, Jill Mesirov, Dyann Wirth, Roger Wiegand and Quique Bassat. *Biomarker signatures based on blood proteins distinguish bacterial, virus, and malaria etiology of pediatric clinical pneumonia*
125. **Marcela Mendoza**, Jeffrey McKinstry, Arnon Amir and Dharmendra Modha. *Real-Time Gesture Localization and Classification Using Cognitive-Inspired Hardware*
126. **Putu Ayu Sudyanti**, Vinayak Rao and Hyonho Chun. *Estimating Contamination Rates and Detection of Somatic Mutations in Paired Tumor and Normal NGS Data via Bayesian Nonparametrics*
127. Withdrawn
128. **Jennifer Wei**, David Duvenaud and Alan Aspuru-Guzik. *Convolutional networks for organic chemistry reaction prediction*
129. **Negar Ghourchian**, Michel Allegue and Doina Precup. *Semi-supervised Approach for Passive Indoor Localization using Wifi Signals*
130. **Tamara Louie**. *Near-Real-Time Influenza Prediction using Dynamically Recalibrated AutoRegressive Electronic health record Support Vector Machine (ARES) Models*
131. **Bianca Dumitrascu**, Roberta de Vito, Christopher Brown and Barbara Engelhardt. *A meta tissue nonparametric factor analysis model for gene co-expression under structured and unstructured noise*
132. **Shabnam Tafreshi** and Mona Diab. *Classifying Emotions in Sentence-Level Text Using Tree Kernel with Syntactic and Semantic Features in Multi-Genre Corpus*
133. **Coline Devin**, Abhishek Gupta, Sergey Levine, Trevor Darrell and Pieter Abbeel. *Modular Networks for Multi-Task Multi-Robot Transfer*
134. **Konstantina Palla**, François Caron and Yee Whye Teh. *Bayesian nonparametrics for Sparse Dynamic Networks*
135. **Amal Rannen Triki** and Matthew B Blaschko. *Stochastic Function Norm Regularization of Deep Networks*
136. Kurt Bollacker, **Natalia Díaz Rodríguez** and Xian Li. *Beyond Clothing Ontologies: Modeling Fashion with Subjective Influence Networks*
137. **Tsui-Wei Weng**, Daniele Melati, Andrea Melloni and Luca Daniel. *Non-Gaussian Correlated Process Variations in Integrated Photonics*
138. **Victoria Dean**, Andrew DeLong and Brendan Frey. *Deep Learning for Branch Point Selection in RNA Splicing*
139. **Sabina Tomkins**, Anbang Xu, Yufan Guo and Zhe Liu. *Discovering Dialog Acts on Social Media: A Generative Framework*
140. **Navya Nizamkari**. *A Graph-based Trust-enhanced Recommender System for Service Selection in IOT*
141. **Ana Marasovic** and Anette Frank. *Fine-grained opinion mining with an end-to-end neural model*
142. **Carrie Segal**. *Minimal Connectivity Graph for Hardware Artificial Neural Networks*
143. **Cristina Segalin**, Dong Seon Cheng and Marco Cristani. *Social Profiling through Image Understanding: Personality Inference using Convolutional Neural Networks*
144. James Bedell, Ayush Jaiswal and **Elizabeth Staruk**. *Generating Song Lyrics with Style*
145. Withdrawn

146. **Deeptha Girish**, Vineeta Singh and Anca Ralescu. *Determining the cluster number in the K-means algorithm*
147. **Ruoxi Sun**. *Variational inference for super resolution microscopy*
148. **Diana Borsa**, Thore Graepel and John Shawe-Taylor. *Learning Option-like Features through Multi-task Value Functions*
149. **Lea Frermann**. *A Bayesian Model of Joint Category and Feature Learning*
150. **Koushiki Bose**, Wen-Xin Zhou, Jianqing Fan and Han Liu. *Finite Sample Properties of Robust M-Estimation with Applications to Covariate-Adjusted Large-Scale Multiple Testing*
151. **Ramya Korlakai Vinayak** and Babak Hassibi. *Crowdsourced Clustering: Querying Edges vs Triangles*
152. **Marta Kryven** and William Cowan. *Semi-Automated Classification of Free-form Participant Comments*
153. **Junli Gu**, Yibing Liu, Yuan Gao and Maohua Zhu. *OpenCL caffe: Accelerating and enabling a cross platform machine learning framework*
154. **Kelsey Allen**, Luke Hewitt, Jiajun Wu and Josh Tenenbaum. *Analysis by synthesis for speech recognition*
155. **Ronghui Yan**, Cheng Wu and Yiming Wang. *Exploration and Evaluation Driving Fatigue for High-speed Train: A Parametric SVM Model Based on Multidimensional Visual Cue*
156. Yoshua Bengio, Anirudh Goyal and **Nan Rosemary Ke**. *The Variational Walk Back Algorithm*
157. **Tegan Maharaj** and Christopher Pal. *Fill-in-the-blank QA for large-scale movie dataset understanding*
158. **Lisa Anne Hendricks**, Zeynep Akata, Marcus Rohrbach, Jeff Donahue, Bernt Schiele and Trevor Darrell. *Generating Visual Explanations*
159. Withdrawn
160. **Elaheh Momeni** and Reza Rawassizadeh. *Multimodal Prediction of Individual Mood*
161. Withdrawn
162. **Rachita Chhaparia**, Deepanshu Gupta and Amitabha Mukerjee. *Creating Sense Vectors through Cross-lingual Data*
163. **Olga Slizovskaia**, Emilia Gomez and Gloria Haro. *Automatic musical instrument recognition in audiovisual recordings by combining image and audio classification strategies*
164. **Luiza Sayfullina** and Mark van Heeswijk. *Fixing random weight initialization as the form of regularization*
165. **Paula Gonzalez-Navarro**, Mohammad Moghadamfalahi, Murat Akcakaya, Melanie Fried-Oken and Deniz Erdogmus. *Bayesian Fusion of Feedback Related Potentials, Event Related Potentials, and Language Models for EEG Based Typing Systems*
166. **Daniela Mazza**, Angel Juan and Laura Calvet. *Urban Mobile Cloud Computing: using learnheuristics for optimizing wireless communication in Smart Cities*
167. **Alina Selega**, Christel Sirocchi, Ira Iosub, Sander Granneman and Guido Sanguinetti. *Robust statistical modeling greatly improves sensitivity of high-throughput RNA structure probing experiments*
168. **Corina Gurau**, Chi Hay Tong and Ingmar Posner. *Predicting Robot Performance based on Past Experience*
169. **Jessa Bekker**, Arthur Choi and Guy Van den Broeck. *Learning the Structure of Probabilistic SDDs*
170. **Eyrun Eyjolfssdottir**, Kristin Branson, Yisong Yue and Pietro Perona. *Learning recurrent representations for dynamic behavior modeling*
171. **Musfira Jilani**, Pdraig Corcoran and Michela Bertolotto. *Structured and Unstructured Machine Learning for Crowdsourced Spatial Data*
172. **Julia Olkhovskaya** and Vladimir V'yugin. *Fixed-Share for specialized experts*

173. **Evangelia Christakopoulou** and George Karypis. *Local Item-Item Models For Top-N Recommendation*
174. **Judy Hoffman**, Eric Tzeng, Kate Saenko and Trevor Darrell. *Domain Confusion for Unsupervised Adaptation of Deep Visual Recognition Models*
175. **Samaneh Khoshrou** and Jaime S Cardoso. *Towards Never-Ending Learning from Evolving Video Streams*
176. **Jing Yuan**, Andreas Lommatzsch and Sahin Albayrak. *Contextual Factors Involvement for Score Modeling under LambdaRank in Recommender Systems*
177. **Sabrina Rossberger**, Carsten Haubold and Heike Boehm. *Automated segmentation, tracking and quantitative image analyses of collective cellular migration*
178. **Jovana Mitrovic**, Dino Sejdinovic and Yee Whye Teh. *Disentangling the Factors of Variation at Initialization In Neural Networks*
179. **Melanie Fernandez Pradier** and Fernando Perez-Cruz. *Case-Control Indian Buffet Process for Biomarker Discovery in Clinical Trials*
180. **Li-Fang Cheng**, Gregory Darnell, Corey Chivers, Michael Draugelis, Kai Li and Barbara Engelhardt. *MedGP: A Sparse Gaussian Process Framework for Multi-Covariate Medical Time-Series Analysis*
181. **Genna Gliner**, Yoson Park, Christopher Brown and Barbara Engelhardt. *Identifying regulatory variants in large-scale genetic expression studies with zero-inflated Poisson linear models*
182. **Tania Lorido Botran**. *Anomaly detection in Virtual Machine performance with Dirichlet Process Gaussian Mixture Models*
183. **Azam Hamidinekoo**, Erika R. E Denton and Reyer Zwiggelaar. *Breast Cancer Prediction and Phenotyping based on Mammographic and Histologic Data*
184. **Corina Florescu** and Cornelia Caragea. *An Unsupervised Algorithm for Keyphrase Extraction*
185. **Ruth C Fong**, Walter J Scheirer and David D Cox. *Using human brain activity to guide machine learning*
186. Ashwini Tonge and **Cornelia Caragea**. *DeepPrivate: Accurate Prediction of Images Privacy on the Web*
187. **Maria Panteli**. *Automatic tagging in world music collections*
188. **Laura Florescu** and Will Perkins. *Spectral thresholds in the bipartite stochastic block model*
189. **Aline Villavicencio**, Silvio Cordeiro, Carlos Ramisch and Marco Idiart. *Identifying Idiomatic Language with Distributional Semantic Models*
190. **Victoria Ashley Villar**. *Estimating Supernova Metallicities Using Neural Networks*
191. **Julia Spinelli**. *Discovering Groups of Brains with Similar Spatial Patterns of Correlated Regions*
192. **Andrea Yanez**. *Decision Support System for Pandemic Management*
193. **Maja Svanberg**. *A multi-class approach for categorizing blocks-programming projects*
194. **Ellyn Ayton** and Svitlana Volkova. *Predicting Influenza Dynamics with Neural Networks Using Signals from Social Media*
195. **Hannah Rashkin**, Yejin Choi and Svitlana Volkova. *Forecasting Event-Driven Connotation Dynamics and Classifying Event Types on Twitter with LSTMs*
196. **Reyhane Askari Hemmat** and Abdelhakim Hafid. *An Unbalanced Classification Problem: SLA Violation Prediction*
197. **Minyoung Kim**, Stefano Alletto and Luca Rigazio. *Similarity Mapping with Enhanced Siamese Network for Multi-Object Tracking*
198. **Patricia Ordóñez** and Abiel Roche-Lima. *Classification of Physiological Data for Intelligent Decision-aid Tools for Intensive Care Units*
199. **Maryamossadat Aghili** and Ruogu Fang. *Towards High-Throughput Abnormal Brain Screening in MRI Images*

200. **Spandana Gella** and Margaret Mitchell. *Residual Multiple Instance Learning for Visually Impaired Image Descriptions*
201. **Subarna Tripathi**, Zachary C Lipton, Serge Belongie and Truong Nguyen. *Context Matters: Refining Object Detection in Video with Recurrent Neural Networks*
202. **Eliana Lorch**. *Spectral Decomposition of Deep Network Optimization Trajectories*
203. **Sandy Huang**, David Held, Pieter Abbeel and Anca Dragan. *Enabling Robots to Communicate what They've Learned*
204. **Yao Qin**, Dongjin Song, Haifeng Chen, Geoff Jiang and Garrison Cottrell. *Attention-based Recurrent Neural Network for Time Series Prediction*
205. **Lina Lin**, Mathias Drton and Ali Shojaie. *Estimation of high-dimensional graphical models using regularized score matching*
206. **Yulia Rubanova**, Jeff Wintersinger, Amit Deshwar, Nil Sahin and Quaid Morris. *Topic modelling through time to track tumour evolution*
207. **Sindhu Ghanta**, Jennifer Dy, Kivanc Kose, Dana Brooks, Milind Rajadhyaksha and Michael Jordan. *A Generative Latent Space and Shape Model for 3D Segmentation of the Dermis/Epidermis in Reflectance Confocal Microscopy Images*
208. **Vidhya Murali**. *Music Beyond Genres*
209. **Nadia M Ady** and Patrick M Pilarski. *Domains for Investigating Curious Behaviour in Reinforcement Learning Agents*
210. **Smitha Milli**, Falk Lieder and Tom Griffiths. *Optimal Cognitive Systems for Bounded-Rational Metareasoning*
211. **Erika Strandberg**, Catherine Ross, Natalie Pageler and Mohsen Bayati. *A new pediatric early warning score: predicting rare events using medical record data in real time*
212. **Lisa Wang**, Angela Sy, Larry Liu and Chris Piech. *What Will You Code Next? Deep Knowledge Tracing on Open-Ended Exercises*
213. **Erin Ledell**. *Scalable Ensemble Learning with H2O Ensemble*
214. **Jianghong Shi**, Eric Shea-Brown and Michael A Buice. *Comparing Representations between Mouse Visual Cortex and Deep Neural Networks*
215. **Yali Wan** and Marina Meila. *Model free recovery guarantees in community detection*
216. **Cheng Zhi Huang**. *Music Autofill*
217. **Nafisa Sharif**. *A Bayesian Optimisation Model for Activity Prediction in Drug Design*
218. **Yuanyuan Pao**, James Murphy and Asif Haque. *Estimation and Prediction for Vehicle Locations, Trajectories, and Travel Times*
219. **Samaneh Azadi**, Jiashi Feng, Stefanie Jegelka and Trevor Darrell. *Auxiliary Image Regularization For Deep CNNs With Noisy Labels*
220. **Dianhuan Lin**, Eyal Dechter, Kevin Ellis, Joshua Tenenbaum and Stephen Muggleton. *Bias reformulation for one-shot function induction*
221. **Mariya Vasileva**, David Forsyth and Svetlana Lazebnik. *What Makes a Meadow Lush? MRF-Augmented Generative Networks for Synthesizing Natural Scene Images with Desired Transient Attributes*

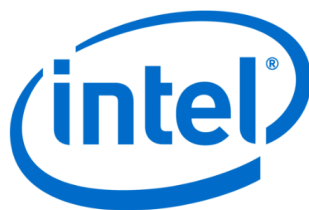
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We organize events and run programs to support women in the field of machine learning. Since our first workshop in 2006, we have been creating opportunities for women in machine learning to present and promote their research. The WiML board was established in 2009 and supports long term efforts related to WiML and WiML events.

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