

Compiling (pdflatex; bibtex; pdflatex; pdflatex) this document produces a bibliography based on the contents of `temp.all.bib`. If this rendering looks correct, `cp templ.all.bib all.bib`, commit, and push to update the server.

References

- [ABE19] Andreas Anastasiou, Krishnakumar Balasubramanian, and Murat A. Erdogdu. “Normal Approximation for Stochastic Gradient Descent via Non-Asymptotic Rates of Martingale CLT”. In: *arXiv e-prints*, arXiv:1904.02130 (2019), arXiv:1904.02130. arXiv: 1904 . 02130 [math.ST].
- [Acu+18] David Acuna, Huan Ling, Amlan Kar, and Sanja Fidler. “Efficient Interactive Annotation of Segmentation Datasets with Polygon-RNN++”. In: (2018).
- [AFR19] Nathanael L. Ackerman, Cameron E. Freer, and Daniel M. Roy. *On the computability of conditional probability*. To appear. 2019. arXiv: 1005.3014.
- [AM18] Stuart Armstrong and Sören Mindermann. “Occams razor is insufficient to infer the preferences of irrational agents”. In: *Advances in Neural Information Processing Systems 31*. Ed. by S. Bengio, H. Wallach, H. Larochelle, K. Grauman, N. Cesa-Bianchi, and R. Garnett. Curran Associates, Inc., 2018, pp. 5598–5609. URL: <http://papers.nips.cc/paper/7803-occams-razor-is-insufficient-to-infer-the-preferences-of-irrational-agents.pdf>.
- [ARH17] M Abdalla, F Rudzicz, and G Hirst. “Rhetorical structure and Alzheimer’s disease”. In: *Aphasiology* 32.1 (2017), pp. 41–60. URL: <http://www.tandfonline.com/doi/abs/10.1080/02687038.2017.1355439?journalCode=paph20>.
- [Ash+18] Hassan Ashtiani, Shai Ben-David, Nicholas Harvey, Christopher Liaw, Abbas Mehrabian, and Yaniv Plan. “Nearly tight sample complexity bounds for learning mixtures of Gaussians via sample compression schemes”. In: *Advances in Neural Information Processing Systems 31*. Ed. by S. Bengio, H. Wallach, H. Larochelle, K. Grauman, N. Cesa-Bianchi, and R. Garnett. Curran Associates, Inc., 2018, pp. 3412–3421. URL: <http://papers.nips.cc/paper/7601-nearly-tight-sample-complexity-bounds-for-learning-mixtures-of-gaussians-via-sample-compression-schemes.pdf>.
- [Axt+18] RB Axtell, C Munteanu, CD Epp, F Rudzicz, and Y Aly. “Touch-Supported Voice Recording to Facilitate Forced Alignment of Text and Speech in an E-Reading Interface”. In: *Proceedings of the 2018 ACM International Conference on Intelligent User Interfaces*. 2018.

URL: <http://www.cs.toronto.edu/~baxtell/TouchSupportedForcedAlignment2018.pdf>.

- [Bal+18] A Balagolapan, J Novikova, F Rudzicz, and M Ghassemi. “The effect of heterogeneous data for Alzheimer’s disease detection from speech”. In: *NeurIPS ML4H*. 2018. URL: <https://arxiv.org/abs/1811.12254>.
- [Bar+18a] Fabien Baradel, Christian Wolf, Julien Mille, and Graham W. Taylor. “Glimpse Clouds: Human Activity Recognition from Unstructured Feature Points”. In: *CoRR* abs/1802.07898 (2018). arXiv: 1802.07898. URL: <http://arxiv.org/abs/1802.07898>.
- [Bar+18b] Sergey Bartunov, Adam Santoro, Blake Richards, Luke Marris, Geoffrey E Hinton, and Timothy Lillicrap. “Assessing the Scalability of Biologically-Motivated Deep Learning Algorithms and Architectures”. In: *Advances in Neural Information Processing Systems 31*. Ed. by S. Bengio, H. Wallach, H. Larochelle, K. Grauman, N. Cesa-Bianchi, and R. Garnett. Curran Associates, Inc., 2018, pp. 9368–9378. URL: <http://papers.nips.cc/paper/8148-assessing-the-scalability-of-biologically-motivated-deep-learning-algorithms-and-architectures.pdf>.
- [BD+16] B Ben-David, N Multani, V Shakuf, F Rudzicz, and P Van Lieshout. “Prosody and semantics are separate but not separable channels in the perception of emotional speech: Test of Rating of Emotions in Speech (T-RES)”. In: *Journal of Speech, Language, and Hearing Research* 59.72-80 (2016). URL: <http://jslhr.pubs.asha.org/article.aspx?articleid=2497777>.
- [Bog+17] J Boger, F Rudzicz, H Chinane, K Jónasdóttir, M Wambua, and J Polgar. “CARE-RATE: Initial development of an artificially intelligent online tool for connecting caregivers to relevant support”. In: *RESNA*. 2017. URL: <https://www.resna.org/sites/default/files/conference/2017/cac/Boger.html>.
- [BR19] A Budhkar and F Rudzicz. “Augmenting word2vec with latent Dirichlet allocation within a clinical application”. In: *NAACL*. 2019. URL: <https://arxiv.org/abs/1808.03967>.
- [Bud+19] A Budhkar, K Vishnubhotla, S Hossain, and F Rudzicz. “Generative Adversarial Networks for text using word2vec intermediaries”. In: *arXiv preprint arXiv:1904.02293*. 2019. URL: <https://arxiv.org/abs/1904.02293>.
- [Cer+17a] M Cernak, JR Orozco-Arroyave, F Rudzicz, H Christensen, and E Noth and JC Vasquez-Correa. “Characterisation of voice quality of Parkinson’s disease using differential phonological posterior features”. In: *Computer Speech & Language* 46.196–208 (2017). URL: <http://www.sciencedirect.com/science/article/pii/S0885230817300724>.

- [Cer+17b] M Cernak, E Noeth, F Rudzicz, H Christensen, JR Orozco-Arroyave, R Arora, T Bocklet, H Chinaei, J Hannink, PS Nidadavolu, JC Vasquez, M Yancheva, A Vann, and N Vogler. “On the impact of non-modal phonation on phonological features”. In: *ICASSP*. 2017. URL: <http://ieeexplore.ieee.org/document/7953126/>.
- [Cha+18a] P Chauhan, J Boger, T Hussein, S Moon, F Rudzicz, and J Polgar. In: May 2018.
- [Cha+18b] P Chauhan, J Boger, T Hussein, S Moon, F Rudzicz, and J Polgar. “Developing innovative interdisciplinary technological solutions for caregivers of older adults within Canada’s technology and aging network”. In: *12th ISPRM World Congress, Paris France*. 2018. URL: <https://www.sciencedirect.com/science/article/pii/S1877065718310273?via%3Dihub>.
- [Cha+19] Chun-Hao Chang, Elliot Creager, Anna Goldenberg, and David Duvenaud. “Explaining Image Classifiers by Counterfactual Generation”. In: *International Conference on Learning Representations*. 2019. URL: <https://openreview.net/forum?id=B1MXz20cYQ>.
- [Che+18a] Tian Qi Chen, Xuechen Li, Roger B Grosse, and David K Duvenaud. “Isolating Sources of Disentanglement in Variational Autoencoders”. In: *Advances in Neural Information Processing Systems 31*. Ed. by S. Bengio, H. Wallach, H. Larochelle, K. Grauman, N. Cesa-Bianchi, and R. Garnett. Curran Associates, Inc., 2018, pp. 2610–2620. URL: <http://papers.nips.cc/paper/7527-isolating-sources-of-disentanglement-in-variational-autoencoders.pdf>.
- [Che+18b] Tian Qi Chen, Xuechen Li, Roger Grosse, and David Duvenaud. *Isolating Sources of Disentanglement in Variational Autoencoders*. 2018. URL: <https://openreview.net/forum?id=BJdMRoCIif>.
- [Che+18c] Tian Qi Chen, Yulia Rubanova, Jesse Bettencourt, and David Duvenaud. “Neural Ordinary Differential Equations”. In: *Advances in Neural Information Processing Systems (NeurIPS)*. Ed. by Hanna Wallach, Hugo Larochelle, Kristen Grauman, and Nicolás Cesa-Bianchi. Vol. 32. Cambridge, MA: MIT Press, 2018. arXiv: 1806.07366. URL: <https://arxiv.org/abs/1806.07366>.
- [Chi+16] H Chinaei, A Danks, T Mehta, L Chan-Currie, H Lin, and F Rudzicz. “Identifying and avoiding confusion in dialogue with people with Alzheimer’s disease”. In: *Computational Linguistics* 43(2).377–406 (2016). URL: http://www.mitpressjournals.org/doi/abs/10.1162/COLI_a_00290.
- [Chu+17] Ching-Yao Chuang, Jiaman Li, Antonio Torralba, and Sanja Fidler. “Learning to Act Properly: Predicting and Explaining Affordances from Images”. In: *CoRR* abs/1712.07576 (2017). arXiv: 1712.07576. URL: <http://arxiv.org/abs/1712.07576>.

- [Chu+18] Hang Chu, Wei-Chiu Ma, Kaustav Kundu, Raquel Urtasun, and Sanja Fidler. “SurfConv: Bridging 3D and 2D Convolution for RGBD Images”. In: *CoRR* abs/1812.01519 (2018). arXiv: 1812.01519. URL: <http://arxiv.org/abs/1812.01519>.
- [Cla+18] P Clarkson, J Ponn, G Richardson, F Rudzicz, A Tsang, and J Wang. “A Textual Analysis of U.S. Corporate Social Responsibility Reports”. In: *2018 Canadian Academic Accounting Association (CAAA) Annual Conference*. 2018. URL: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3102627.
- [CLD18a] Chris Cremer, Xuechen Li, and David Duvenaud. “Inference Suboptimality in Variational Autoencoders”. In: *Proceedings of the 35th International Conference on Machine Learning (ICML)*. Ed. by Jennifer Dy and Andreas Kraus. Vol. 80. Proceedings of Machine Learning Research. Stockholmsmässan, Stockholm, Sweden: PMLR, 2018. arXiv: 1801.03558. URL: <https://arxiv.org/abs/1801.03558>.
- [CLD18b] Chris Cremer, Xuechen Li, and David Duvenaud. “Inference Suboptimality in Variational Autoencoders”. In: *Proceedings of the 35th International Conference on Machine Learning*. Ed. by Jennifer Dy and Andreas Krause. Vol. 80. Proceedings of Machine Learning Research. Stockholmsmässan, Stockholm Sweden: PMLR, 2018, pp. 1078–1086. URL: <http://proceedings.mlr.press/v80/cremer18a.html>.
- [CLF18] Hang Chu, Daiqing Li, and Sanja Fidler. “A Face-to-Face Neural Conversation Model”. In: *2018 IEEE/CVF Conference on Computer Vision and Pattern Recognition* (2018), pp. 7113–7121.
- [CMD17] Chris Cremer, Quaid Morris, and David Duvenaud. “Reinterpreting Importance-Weighted Autoencoders”. In: *International Conference on Learning Representations (ICLR) Workshop Track*. 2017. arXiv: 1704.02916. URL: <https://arxiv.org/abs/1704.02916>.
- [Dai+15] P Dai, F Rudzicz, YI Soon, A Mihailidis, and H Ding. “2D Psychoacoustic modeling of equivalent masking for automatic speech recognition”. In: *Signal Processing* 115 (2015), pp. 9–19. URL: <http://www.sciencedirect.com/science/article/pii/S0165168415001115>.
- [DFL18] Bo Dai, Sanja Fidler, and Dahua Lin. “A Neural Compositional Paradigm for Image Captioning”. In: *Advances in Neural Information Processing Systems 31*. Ed. by S. Bengio, H. Wallach, H. Larochelle, K. Grauman, N. Cesa-Bianchi, and R. Garnett. Curran Associates, Inc., 2018, pp. 658–668. URL: <http://papers.nips.cc/paper/7346-a-neural-compositional-paradigm-for-image-captioning.pdf>.
- [DHR15] P Dai, S-S Ho, and F Rudzicz. “Sequential behavior prediction based on hybrid similarity and cross-user activity transfer”. In: *Knowledge-based systems* 77 (2015), pp. 29–39. URL: <http://www.sciencedirect.com/science/article/pii/S0950705114004729>.

- [DM18] Richard Zemel David Madras Toniann Pitassi. *Predict Responsibly: Increasing Fairness by Learning to Defer*. 2018. URL: https://openreview.net/forum?id=SJUX_MWCZ.
- [DR18a] Gintare Karolina Dziugaite and Daniel M Roy. “Data-dependent PAC-Bayes priors via differential privacy”. In: *Advances in Neural Information Processing Systems 31*. Ed. by S. Bengio, H. Wallach, H. Larochelle, K. Grauman, N. Cesa-Bianchi, and R. Garnett. Curran Associates, Inc., 2018, pp. 8430–8441. URL: <http://papers.nips.cc/paper/8063-data-dependent-pac-bayes-priors-via-differential-privacy.pdf>.
- [DR18b] Gintare Karolina Dziugaite and Daniel M. Roy. “Data-dependent PAC-Bayes priors via differential privacy”. In: *Advances in Neural Information Processing Systems (NeurIPS)*. Ed. by Hanna Wallach, Hugo Larochelle, Kristen Grauman, and Nicolás Cesa-Bianchi. Vol. 32. Cambridge, MA: MIT Press, 2018. arXiv: 1802.09583.
- [DR18c] Gintare Karolina Dziugaite and Daniel M. Roy. “Entropy-SGD optimizes the prior of a PAC-Bayes bound: Generalization properties of Entropy-SGD and data-dependent priors”. In: *Proceedings of the 35th International Conference on Machine Learning (ICML)*. Ed. by Jennifer Dy and Andreas Kraus. Vol. 80. Proceedings of Machine Learning Research. Stockholmsmässan, Stockholm, Sweden: PMLR, 2018. arXiv: 1712.09376.
- [EMS18a] Murat A. Erdogdu, Lester Mackey, and Ohad Shamir. “Global Non-convex Optimization with Discretized Diffusions”. In: *arXiv e-prints*, arXiv:1810.12361 (2018), arXiv:1810.12361. arXiv: 1810.12361 [stat.ML].
- [EMS18b] Murat A Erdogdu, Lester Mackey, and Ohad Shamir. “Global Non-convex Optimization with Discretized Diffusions”. In: *Advances in Neural Information Processing Systems 31*. Ed. by S. Bengio, H. Wallach, H. Larochelle, K. Grauman, N. Cesa-Bianchi, and R. Garnett. Curran Associates, Inc., 2018, pp. 9671–9680. URL: <http://papers.nips.cc/paper/8175-global-non-convex-optimization-with-discretized-diffusions.pdf>.
- [ER17] K Ethayarajk and F Rudzicz. “The effect of photoperiod on the mood of Reddit users”. In: *Cyberpsychology, Behavior, and Social Networking* 20(4).238-245 (2017). URL: <https://www.ncbi.nlm.nih.gov/pubmed/28394216>.
- [Esp+18] Shadrielle Melijah G Espiritu, Lydia Y Liu, Yulia Rubanova, Vinayak Bhandari, Erle M Holgersen, Lesia M Szyca, Natalie S Fox, Melvin LK Chua, Takafumi N Yamaguchi, Lawrence E Heisler, et al. “The evolutionary landscape of localized prostate cancers drives clinical aggression”. In: *Cell* 173.4 (2018), pp. 1003–1013. DOI: 10.1016/j.cell.2018.03.029. URL: <https://doi.org/10.1016/j.cell.2018.03.029>.

- [Far18] Amir-massoud Farahmand. “Iterative Value-Aware Model Learning”. In: *Advances in Neural Information Processing Systems 31*. Ed. by S. Bengio, H. Wallach, H. Larochelle, K. Grauman, N. Cesa-Bianchi, and R. Garnett. Curran Associates, Inc., 2018, pp. 9072–9083. URL: <http://papers.nips.cc/paper/8121-iterative-value-aware-model-learning.pdf>.
- [FMR15] K Fraser, JA Meltzer, and F Rudzicz. “Linguistic features differentiate Alzheimer’s from controls in narrative speech”. In: *Journal of Alzheimer’s Disease* 49.3 (2015), pp. 407–422. URL: <http://content.iospress.com/articles/journal-of-alzheimers-disease/jad150520>.
- [FNMR15] A Francois-Nienaber, JA Meltzer, and F Rudzicz. “Lateralization in emotional speech perception following transcranial direct current stimulation”. In: *Interspeech*. 2015. URL: <http://www.cs.toronto.edu/~frank/Download/Papers/IS15-tDCS-EP.pdf>.
- [FR15] A Frydenlund and F Rudzicz. “Emotional affect estimation using video and EEG data in deep neural networks”. In: *Proceedings of Canadian AI*. 2015. URL: http://link.springer.com/chapter/10.1007/978-3-319-18356-5_24.
- [Fra+19a] Jonathan Frankle, Gintare Karolina Dziugaite, Daniel M. Roy, and Michael Carbin. *The Lottery Ticket Hypothesis at Scale*. 2019. arXiv: 1903.01611. URL: <https://arxiv.org/abs/1903.01611>.
- [Fra+19b] KC Fraser, F Zeller, D Harris-Smith, S Mohammad, and F Rudzicz. “How do we feel when a robot dies? Emotions expressed on Twitter before and after hitchBOT’s destruction”. In: *The 10th Workshop on Computational Approaches to Subjectivity, Sentiment and Social Media Analysis (WASSA 2019)*. 2019. URL: <http://saifmohammad.com/WebDocs/hitchBOT-WASSA19.pdf>.
- [Fra+19c] KC Fraser, N Linz, B Li, KL Fors, F Rudzicz, A Konig, J Alexandersson, P Robert, and D Kokkinakis. “Multilingual prediction of Alzheimer’s disease through domain adaptation and concept-based language modeling”. In: *NAACL*. 2019. URL: <https://www.dfki.de/web/forschung/projekte-publikationen/publikationen/publikation/10256/>.
- [FRH16] K Fraser, F Rudzicz, and G Hirst. “Detecting late-life depression in Alzheimer’s disease through analysis of speech and language”. In: *CLPsych*. 2016. URL: <http://www.aclweb.org/anthology/W16-0301>.
- [GB+18] Rafael Gomez-Bombarelli, Jennifer N. Wei, David Duvenaud, Jose Miguel Hernandez-Lobato, Benjamin Sanchez-Lengeling, Dennis Sheberla, Jorge Aguilera-Iparraguirre, Timothy D. Hirzel, Ryan P. Adams, and Alan Aspuru-Guzik. “Automatic chemical design using a data-driven continuous representation of molecules”. In:

- American Chemical Society Central Science* (2018). arXiv: 1610.02415. URL: <http://arxiv.org/abs/1610.02415>.
- [Gom+17] Aidan N Gomez, Mengye Ren, Raquel Urtasun, and Roger B Grosse. “The reversible residual network: Backpropagation without storing activations”. In: *Advances in Neural Information Processing Systems (NIPS)*. Ed. by Samy Bengio, Hanna Wallach, Rob Fergus, and S.V.N. Vishwanathan. Vol. 31. Cambridge, MA: MIT Press, 2017. arXiv: 1707.04585 [cs.LG]. URL: <https://arxiv.org/abs/1707.04585>.
- [Gor+18] L Gordon, P Austin, F Rudzicz, and T Grantcharov. “MySurgeryRisk and Machine Learning: A Promising Start to Real-time Clinical Decision Support”. In: *Annals of Surgery* 269.1 (2018), pp. 14–15. URL: https://journals.lww.com/annalsofsurgery/Citation/publishahead/MySurgeryRisk_and_Machine_Learning_A_Promising.95490.aspx.
- [GR15] YA Ghassabeh and F Rudzicz. “An incremental algorithm for finding principal curves”. In: *IET Signal Processing* 9.7 (2015), pp. 521–528. URL: <http://digital-library.theiet.org/content/journals/10.1049/iet-spr.2014.0347;jsessionid=rm7fg7lafp4h.x-iet-live-01>.
- [GR16] YA Ghassabeh and F Rudzicz. “The mean shift algorithm and its relation to kernel regression”. In: *Information Sciences* 348.198–208 (2016). URL: <http://authors.elsevier.com/a/1Se0M4ZQDoHd7>.
- [GR18] Y Aliyari Ghassabeh and F Rudzicz. “Modified mean shift algorithm”. In: *IET Image Processing* 12.12 (2018), pp. 2172–2177. URL: <http://ietdl.org/t/n084Z>.
- [Gra+17] Will Grathwohl, Dami Choi, Yuhuai Wu, Geoff Roeder, and David Duvenaud. “Backpropagation through the Void: Optimizing control variates for black-box gradient estimation”. In: *International Conference on Learning Representations (ICLR)*. 2017. arXiv: 1711.00123. URL: <https://arxiv.org/abs/1711.00123>.
- [Gra+18a] Will Grathwohl, Dami Choi, Yuhuai Wu, Geoff Roeder, and David Duvenaud. “Backpropagation through the Void: Optimizing control variates for black-box gradient estimation”. In: *International Conference on Learning Representations*. 2018. URL: <https://openreview.net/forum?id=SyZKd1bCW>.
- [Gra+18b] Will Grathwohl, Elliot Creager, Seyed Kamyar Seyed Ghasemipour, and Richard Zemel. *Gradient-based Optimization of Neural Network Architecture*. 2018. URL: <https://openreview.net/forum?id=HkSm8t1PM>.

- [Gra+19] Will Grathwohl, Ricky T. Q. Chen, Jesse Bettencourt, and David Duvenaud. “Scalable Reversible Generative Models with Free-form Continuous Dynamics”. In: *International Conference on Learning Representations*. 2019. URL: <https://openreview.net/forum?id=rJxgknCcK7>.
- [Gre+15] P Green, R Marxer, S Cunningham, H Christensen, F Rudzicz, M Yancheva, A Coy, M Malavasi, and L Desideri. “Remote speech technology for speech professionals - the CloudCAST initiative”. In: *6th workshop on Speech and Language Processing for Assistive Technologies (SLPAT) at Interspeech*. 2015. URL: <http://www.slp.at.org/slp.at2015/papers/green-marxer-et-al.pdf>.
- [Gre+16] P Green, R Marxwe, S Cunningham, H Christensen, F Rudzicz, M Yancheva, A Coy, M Malavasi, L Desideri, and F Tamburini. “CloudCAST - Remote speech technology for speech professionals”. In: *Interspeech*. 2016. URL: https://www.researchgate.net/publication/307889553_CloudCAST_-_Remote_Speech_Technology_for_Speech_Professionals.
- [GRG18] L Gordon, F Rudzicz, and T Grantcharov. “Finding Patterns of Events in Laparoscopic Roux-en-Y Gastric Bypass with Machine Learning Techniques”. In: *Scientific Forum program at the American College of Surgeons*. 2018. URL: [https://www.journalacs.org/article/S1072-7515\(18\)31848-9/fulltext](https://www.journalacs.org/article/S1072-7515(18)31848-9/fulltext).
- [GRM15] YA Ghassabeh, F Rudzicz, and HA Moghaddam. “Fast incremental LDA feature extraction”. In: *Pattern Recognition* 48.6 (2015), pp. 1999–2012. URL: <http://www.sciencedirect.com/science/article/pii/S0031320314005214>.
- [GRM16] YA Ghassabeh, F Rudzicz, and HA Moghaddam. “Fast adaptive algorithms for optimal feature extraction from Gaussian data”. In: *Pattern Recognition Letters* 70.73-79 (2016). URL: <http://www.sciencedirect.com/science/article/pii/S0167865515004079>.
- [GTM18] Angus Galloway, Graham W. Taylor, and Medhat Moussa. “Attacking Binarized Neural Networks”. In: *International Conference on Learning Representations*. 2018. URL: <https://openreview.net/forum?id=HkTEffZRb>.
- [GWP18] Vikash Goel, Jameson Weng, and Pascal Poupart. “Unsupervised Video Object Segmentation for Deep Reinforcement Learning”. In: *Advances in Neural Information Processing Systems 31*. Ed. by S. Bengio, H. Wallach, H. Larochelle, K. Grauman, N. Cesa-Bianchi, and R. Garnett. Curran Associates, Inc., 2018, pp. 5683–5694. URL: <http://papers.nips.cc/paper/7811-unsupervised-video-object-segmentation-for-deep-reinforcement-learning.pdf>.

- [HBM18] Kevin CH Ha, Benjamin J Blencowe, and Quaid Morris. “QAPA: a new method for the systematic analysis of alternative polyadenylation from RNA-seq data”. In: *Genome Biology* 19 (2018), p. 45. DOI: 10.1186/s13059-018-1414-4. URL: <https://doi.org/10.1186/s13059-018-1414-4>.
- [HDR15] S-S Ho, P Dai, and F Rudzicz. “Manifold learning for embedding multivariate variable-length sequences with an application to similarity search”. In: *IEEE Transactions on Neural Networks and Learning Systems* 27.6 (2015), pp. 1333–1344. URL: <http://ieeexplore.ieee.org/xpl/articleDetails.jsp?reload=true&arnumber=7060711>.
- [Hos+18] S Hossain, K Jamali, Y Li, and F Rudzicz. “ChainGAN: A sequential approach to GANs”. In: *arXiv preprint arXiv:1811.08081*. 2018. URL: <https://arxiv.org/abs/1811.08081>.
- [HR18] T Hussein and J Boger F Rudzicz. “The Impact of Design on Feelings of Trust of Online Information for Family Caregivers of People with Dementia”. In: *British Computer Society 32nd Human Computer Interaction Conference (BHCI-2018), Belfast, UK*. 2018. URL: <https://dl.acm.org/citation.cfm?id=3301145>.
- [Hsu+18] Y-T Hsu, Z Zhu, C-T Wang, S-H Fang, F Rudzicz, and Y Tsao. “Robustness against the channel effect in pathological voice detection”. In: *NeurIPS ML4H*. 2018. URL: <https://arxiv.org/abs/1811.10376>.
- [Hua+19] Sicong Huang, Qiyang Li, Cem Anil, Xuchan Bao, Sageev Oore, and Roger B. Grosse. “TimbreTron: A WaveNet(CycleGAN(CQT(Audio))) Pipeline for Musical Timbre Transfer”. In: *International Conference on Learning Representations*. 2019. URL: <https://openreview.net/forum?id=S1lvm305YQ>.
- [Im+18] Daniel Jiwoong Im, Alllan He Ma, Graham W. Taylor, and Kristin Branson. “Quantitatively Evaluating GANs With Divergences Proposed for Training”. In: *International Conference on Learning Representations*. 2018. URL: <https://openreview.net/forum?id=SJQHjzz0->.
- [Jac+19] Joern-Henrik Jacobsen, Jens Behrmann, Richard Zemel, and Matthias Bethge. “Excessive Invariance Causes Adversarial Vulnerability”. In: *International Conference on Learning Representations*. 2019. URL: <https://openreview.net/forum?id=BkfbpsAcF7>.
- [Jeb+18] S Jeblee, A Budhkar, S Milic, J Pinto, C Pou-Prom, K Vishnubhotla, G Hirst, and F Rudzicz. “Multi-lingual ICD-10 Coding using an Ensemble of Recurrent and Convolutional Neural Networks”. In: *CLEF 2018 eHealth Task 1*. 2018. URL: http://ceur-ws.org/Vol-2125/paper_153.pdf.

- [JKB19] Sheng Jia, Jamie Ryan Kiros, and Jimmy Ba. “DOM-Q-NET: Grounded RL on Structured Language”. In: *International Conference on Learning Representations*. 2019. URL: <https://openreview.net/forum?id=HJgd1nAqFX>.
- [JPY18] Priyank Jaini, Pascal Poupart, and Yaoliang Yu. “Deep Homogeneous Mixture Models: Representation, Separation, and Approximation”. In: *Advances in Neural Information Processing Systems 31*. Ed. by S. Bengio, H. Wallach, H. Larochelle, K. Grauman, N. Cesa-Bianchi, and R. Garnett. Curran Associates, Inc., 2018, pp. 7136–7145. URL: <http://papers.nips.cc/paper/7944-deep-homogeneous-mixture-models-representation-separation-and-approximation.pdf>.
- [Kal+18] Agastya Kalra, Abdullah Rashwan, Wei-Shou Hsu, Pascal Poupart, Prashant Doshi, and Georgios Trimonias. “Online Structure Learning for Feed-Forward and Recurrent Sum-Product Networks”. In: *Advances in Neural Information Processing Systems 31*. Ed. by S. Bengio, H. Wallach, H. Larochelle, K. Grauman, N. Cesa-Bianchi, and R. Garnett. Curran Associates, Inc., 2018, pp. 6944–6954. URL: <http://papers.nips.cc/paper/7926-online-structure-learning-for-feed-forward-and-recurrent-sum-product-networks.pdf>.
- [Kha+19a] FK Khattak, S Jeblee, N Crampton, M Mamdani, and F Rudzicz. “AutoScribe: Extracting clinically pertinent information from patient-clinician dialogues”. In: *MedInfo*. 2019.
- [Kha+19b] FK Khattak, C Pou-Prom, R Wu, and F Rudzicz. “Predicting ICU transfers using text messages between nurses and doctors”. In: *ClinicalNLP 2019*. 2019.
- [Kin+18] Andrew D. King, Juan Carrasquilla, Jack Raymond, Isil Ozfidan, Evgeny Andriyash, Andrew Berkley, Mauricio Reis, Trevor Lanting, Richard Harris, Fabio Altomare, Kelly Boothby, Paul I. Bunyk, Colin Enderud, Alexandre Fréchet, Emile Hoskinson, Nicolas Ladizinsky, Travis Oh, Gabriel Poulin-Lamarre, Christopher Rich, Yuki Sato, Anatoly Yu. Smirnov, Loren J. Swenson, Mark H. Volkmann, Jed Whittaker, Jason Yao, Eric Ladizinsky, Mark W. Johnson, Jeremy Hilton, and Mohammad H. Amin. “Observation of topological phenomena in a programmable lattice of 1,800 qubits”. In: *Nature* 560.7719 (2018), pp. 456–460. DOI: 10.1038/s41586-018-0410-x. URL: <https://doi.org/10.1038/s41586-018-0410-x>.
- [Kip+18a] Thomas Kipf, Ethan Fetaya, Kuan-Chieh Wang, Max Welling, and Richard Zemel. “Neural Relational Inference for Interacting Systems”. In: *Proceedings of the 35th International Conference on Machine Learning (ICML)*. Ed. by Jennifer Dy and Andreas Kraus. Vol. 80. Proceedings of Machine Learning Research. Stockholmsmässan,

- Stockholm, Sweden: PMLR, 2018. arXiv: 1802.04687 [cs.LG]. URL: <http://proceedings.mlr.press/v80/kipf18a.html>.
- [Kip+18b] Thomas Kipf, Ethan Fetaya, Kuan-Chieh Wang, Max Welling, and Richard Zemel. “Neural Relational Inference for Interacting Systems”. In: *Proceedings of the 35th International Conference on Machine Learning*. Ed. by Jennifer Dy and Andreas Krause. Vol. 80. Proceedings of Machine Learning Research. Stockholmsmässan, Stockholm Sweden: PMLR, 2018, pp. 2688–2697. URL: <http://proceedings.mlr.press/v80/kipf18a.html>.
- [Kom+19] M Komeili, C Pou-prom, D Liaqat, K Fraser, M Yancheva, and F Rudzicz. “Talk2Me: Automated linguistic data collection for personal assessment”. In: *PLoS ONE* 14.3 (2019), e0212342. URL: <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0212342>.
- [Kon+17] A Konig, F Rudzicz, KC Fraser, L Kaufman, J Alexandersson, N Linz, J Troger, M Wolters, F Bremond, and P Robert. “Early Detection of Cognitive Disorders Such As Dementia on the Basis of Speech Analysis - a Cross-Linguistic Comparison of Speech Features”. In: *Proceedings of AAIC*. 2017. URL: [https://www.alzheimersanddementia.com/article/S1552-5260\(17\)30544-7/fulltext](https://www.alzheimersanddementia.com/article/S1552-5260(17)30544-7/fulltext).
- [Kor+17] EA Korcovelos, KC Fraser, J Meltzer, G Hirst, and F Rudzicz. “Studying neurodegeneration with automated linguistic analysis of speech data”. In: *Proceedings of AAIC*. 2017. URL: [https://www.alzheimersanddementia.com/article/S1552-5260\(17\)32865-0/fulltext](https://www.alzheimersanddementia.com/article/S1552-5260(17)32865-0/fulltext).
- [KPR] Demetres Kostas, Elizabeth Pang, and Frank Rudzicz. *Machine learning for MEG during speech tasks*. URL: <https://www.nature.com/articles/s41598-019-38612-9>.
- [KPR18] D Kostas, E Pang, and F Rudzicz. “Machine learning for MEG during speech tasks”. In: *Nature Scientific Reports* 9 (2018), p. 1609. URL: <https://www.nature.com/articles/s41598-019-38612-9>.
- [KR16] SW Kim and F Rudzicz. “Combining word prediction and r-ary Huffman coding for text entry”. In: *Interspeech SLPAT Workshop*. 2016. URL: <https://www.semanticscholar.org/paper/Combining-word-prediction-and-r-ary-Huffman-coding-Kim-Rudzicz/0e47ab31d627b4da33e93e2dd1210e56b2bbab01>.
- [KSZ18a] Jack Klys, Jake Snell, and Richard Zemel. “Learning Latent Subspaces in Variational Autoencoders”. In: *Advances in Neural Information Processing Systems 31*. Ed. by S. Bengio, H. Wallach, H. Larochelle, K. Grauman, N. Cesa-Bianchi, and R. Garnett. Curran Associates, Inc., 2018, pp. 6444–6454. URL: <http://papers.nips.cc/paper/>

7880-learning-latent-subspaces-in-variational-autoencoders.pdf.

- [KSZ18b] Jack Klys, Jake Snell, and Richard Zemel. “Learning Latent Subspaces in Variational Autoencoders”. In: *Advances in Neural Information Processing Systems (NeurIPS)*. Ed. by Hanna Wallach, Hugo Larochelle, Kristen Grauman, and Nicol  Cesa-Bianchi. Vol. 32. Cambridge, MA: MIT Press, 2018.
- [KTF19] Seung Wook Kim, Makarand Tapaswi, and Sanja Fidler. “Visual Reasoning by Progressive Module Networks”. In: *International Conference on Learning Representations*. 2019. URL: <https://openreview.net/forum?id=B1fpDsAqt7>.
- [Lad+18] MH Ladly, T Bakker, K Chadha, G Farrelly, K Micak, G Penn, and F Rudzicz. “Reality Recalled: Elders, Memory and VR”. In: *Proceedings of the 2018 IEEE International Conference on Virtual Systems and Multimedia (VSMM)*. 2018. URL: <https://www2.ocadu.ca/sites/www2.ocadu.ca/files/project/Reality%20Recalled%20Paper.pdf>.
- [Law+19] Marc T Law, Jake Snell, Amir massoud Farahmand, Raquel Urtasun, and Richard S Zemel. “Dimensionality Reduction for Representing the Knowledge of Probabilistic Models”. In: *International Conference on Learning Representations*. 2019. URL: <https://openreview.net/forum?id=SygD-hCcF7>.
- [LD18] Jonathan Lorraine and David Duvenaud. *Stochastic Hyperparameter Optimization through Hypernetworks*. 2018. arXiv: 1802.09419. URL: <http://arxiv.org/abs/1802.09419>.
- [Lee+18] Jongmin Lee, Geon-hyeong Kim, Pascal Poupart, and Kee-Eung Kim. “Monte-Carlo Tree Search for Constrained POMDPs”. In: *Advances in Neural Information Processing Systems 31*. Ed. by S. Bengio, H. Wallach, H. Larochelle, K. Grauman, N. Cesa-Bianchi, and R. Garnett. Curran Associates, Inc., 2018, pp. 7923–7932. URL: <http://papers.nips.cc/paper/8017-monte-carlo-tree-search-for-constrained-pomdps.pdf>.
- [LG18] Kevin Luk and Roger Grosse. *A Coordinate-Free Construction of Scalable Natural Gradient*. 2018. arXiv: 1808.10340 [cs.LG]. URL: <https://arxiv.org/abs/1808.10340>.
- [LHR19] B Li, Y-T Hsu, and F Rudzicz. “Detecting dementia in Mandarin Chinese using transfer learning from a parallel corpus”. In: *NAACL*. 2019. URL: <https://arxiv.org/abs/1903.00933>.
- [Lia+18a] Renjie Liao, Marc Brockschmidt, Daniel Tarlow, Alexander Gaunt, Raquel Urtasun, and Richard S. Zemel. *Graph Partition Neural Networks for Semi-Supervised Classification*. 2018. URL: <https://openreview.net/forum?id=rk4Fz2e0b>.

- [Lia+18b] Renjie Liao, Yuwen Xiong, Ethan Fetaya, Lisa Zhang, KiJung Yoon, Xaq Pitkow, Raquel Urtasun, and Richard Zemel. “Reviving and Improving Recurrent Back-Propagation”. In: *Proceedings of the 35th International Conference on Machine Learning*. Ed. by Jennifer Dy and Andreas Krause. Vol. 80. Proceedings of Machine Learning Research. Stockholmsmässan, Stockholm Sweden: PMLR, 2018, pp. 3082–3091. URL: <http://proceedings.mlr.press/v80/liao18c.html>.
- [Lia+18c] D Liaqat, R Wu, A Gershon, H Alshaer, F Rudzicz, and E de Lara. “Challenges with Real-World Smartwatch based Audio Monitoring”. In: *WearSys’18: 4th ACM Workshop on wearable systems and applications*. Munich, Germany, 2018. URL: http://csng.cs.toronto.edu/publication_files/0000/0312/wearsys18-final5_2_.pdf.
- [Lia+18d] D Liaqat, R Wu, A Gershon, H Alshaer, F Rudzicz, and E de Lara. “Speech in Smartwatch based Audio”. In: *MobiSys’18: The 16th Annual International Conference on Mobile Systems, Applications, and Services*. Munich, Germany, 2018. URL: <https://doi.org/10.1145/3210240.3210817>.
- [Lia+18e] D Liaqat, R Wu, E de Lara, T Son, F Rudzicz, H Alshaer, and AS Gershon. “Towards Ambulatory Cough Monitoring using Smartwatches”. In: *Proceedings of the American Thoracic Society*. 2018. URL: https://www.atsjournals.org/doi/abs/10.1164/ajrccm-conference.2018.197.1_MeetingAbstracts.A4983.
- [Lia+19] Renjie Liao, Zhizhen Zhao, Raquel Urtasun, and Richard Zemel. “LanczosNet: Multi-Scale Deep Graph Convolutional Networks”. In: *International Conference on Learning Representations*. 2019. URL: <https://openreview.net/forum?id=BkedznAqKQ>.
- [Luc+18] James Lucas, Shengyang Sun, Richard Zemel, and Roger Grosse. *Aggregated Momentum: Stability Through Passive Damping*. 2018. arXiv: 1804.00325 [cs.LG]. URL: <https://arxiv.org/abs/1804.00325>.
- [LZR18] B Li, R Zhang, and F Rudzicz. “Dropout during inference as a model for neurological degeneration in an image captioning network”. In: *arXiv preprint arXiv:1808.03747*. 2018. URL: <https://arxiv.org/abs/1808.03747>.
- [Mac+18] Matthew MacKay, Paul Vicol, Jimmy Ba, and Roger B Grosse. “Reversible Recurrent Neural Networks”. In: *Advances in Neural Information Processing Systems 31*. Ed. by S. Bengio, H. Wallach, H. Larochelle, K. Grauman, N. Cesa-Bianchi, and R. Garnett. Curran Associates, Inc., 2018, pp. 9029–9040. URL: <http://papers.nips.cc/paper/8117-reversible-recurrent-neural-networks.pdf>.

- [Mac+19] Matthew Mackay, Paul Vicol, Jonathan Lorraine, David Duvenaud, and Roger Grosse. “Self-Tuning Networks: Bilevel Optimization of Hyperparameters using Structured Best-Response Functions”. In: *International Conference on Learning Representations*. 2019. URL: <https://openreview.net/forum?id=r1eEG20qKQ>.
- [Mad+] David Madras, Elliot Creager, Toniann Pitassi, and Richard Zemel. *Fairness Through Causal Awareness: Learning Latent-Variable Models for Biased Data*. arXiv: 1809.02519 [cs.LG]. URL: <https://arxiv.org/abs/1809.02519>.
- [Mad+18] David Madras, Elliot Creager, Toniann Pitassi, and Richard Zemel. “Learning Adversarially Fair and Transferable Representations”. In: *Proceedings of the 35th International Conference on Machine Learning*. Ed. by Jennifer Dy and Andreas Krause. Vol. 80. Proceedings of Machine Learning Research. Stockholmsmässan, Stockholm Sweden: PMLR, 2018, pp. 3384–3393. URL: <http://proceedings.mlr.press/v80/madras18a.html>.
- [MBJ18] James Martens, Jimmy Ba, and Matt Johnson. “Kronecker-factored Curvature Approximations for Recurrent Neural Networks”. In: *International Conference on Learning Representations*. 2018. URL: <https://openreview.net/forum?id=HyMTkQZAb>.
- [MPZ18a] David Madras, Toni Pitassi, and Richard Zemel. “Predict Responsibly: Improving Fairness and Accuracy by Learning to Defer”. In: *Advances in Neural Information Processing Systems 31*. Ed. by S. Bengio, H. Wallach, H. Larochelle, K. Grauman, N. Cesa-Bianchi, and R. Garnett. Curran Associates, Inc., 2018, pp. 6147–6157. URL: <http://papers.nips.cc/paper/7853-predict-responsibly-improving-fairness-and-accuracy-by-learning-to-defer.pdf>.
- [MPZ18b] David Madras, Toniann Pitassi, and Richard Zemel. “Predict Responsibly: Improving Fairness and Accuracy by Learning to Defer”. In: *Advances in Neural Information Processing Systems (NeurIPS)*. Ed. by Hanna Wallach, Hugo Larochelle, Kristen Grauman, and Nicolás Cesa-Bianchi. Vol. 32. Cambridge, MA: MIT Press, 2018. arXiv: 1711.06664 [cs.LG]. URL: <https://arxiv.org/abs/1711.06664>.
- [Mul+16] N Multani, F Rudzicz, WYS Wong, AK Namasvayam, and P Van Lieshout. “Random item generation is affected by age”. In: *Journal of Speech, Language, and Hearing Research* 59.1172-1178 (2016). URL: <http://jslhr.pubs.asha.org/article.aspx?articleid=2565106>.
- [Nam+15] AK Namasivayam, M Pukonen, D Goshulak, J Hard, F Rudzicz, T Rietveld, B Maassen, R Kroll, and PHHM Van Lieshout. “Treatment intensity and childhood apraxia of speech”. In: *International Journal of Language Communication Disorders* 50.4 (2015), pp. 529–546.

- URL: <http://onlinelibrary.wiley.com/doi/10.1111/1460-6984.12154/abstract>.
- [Nau+17] Zacharie Naulet, Ekansh Sharma, Victor Veitch, and Daniel M. Roy. *An estimator for the tail-index of graphex processes*. 2017. arXiv: 1712.01745. URL: [url{https://arxiv.org/abs/1712.01745}](https://arxiv.org/abs/1712.01745).
- [NPPR17] Z Noorian, C Pou-Prom, and F Rudzicz. “On the importance of normative data in speech-based assessment”. In: *ML4H, Machine Learning for Health Workshop at NIPS*. 2017. URL: <https://arxiv.org/abs/1712.00069>.
- [OA+18] JR Orozco-Arroyave, JC Vasquez-Correa, JF Vargas-Bonilla, R Arora, N Dehak, PS Nidadavolu, H Christensen, F Rudzicz, M Yancheva, H Chinaei, A Vann, N Vogler, T Bocklet, M Cernak, Hannink, and E Noth. “NeuroSpeech: An open-source software for Parkinson’s speech analysis”. In: *Digital Signal Processing* 77 (2018), pp. 207–221. URL: <http://www.sciencedirect.com/science/article/pii/S105120041730146X>.
- [OMR15] S Oue, R Marxer, and F Rudzicz. “Automatic dysfluency detection in dysarthric speech using deep belief networks”. In: *6th workshop on Speech and Language Processing for Assistive Technologies (SLPAT) at Interspeech*. 2015. URL: <http://www.slp.at.org/slp.at2015/papers/oue-marxer-rudzicz.pdf>.
- [Par+15a] E Parisotto, YA Ghassabeh, MJ MacDonald, A Cozma, EW Pang, and F Rudzicz. “Automatic identification of received language in MEG”. In: *Interspeech*. 2015. URL: http://www.cs.toronto.edu/~frank/Download/Papers/IS15_kara_MEG.pdf.
- [Par+15b] E Parisotto, YA Ghassabeh, S Freydoonnejad, and F Rudzicz. “EEG dimensionality reduction in automatic identification of synonymy”. In: *ICASSP*. 2015. URL: <http://ieeexplore.ieee.org/document/7178089/>.
- [PPR18] C Pou-Prom and F Rudzicz. “Learning multiview embeddings for assessing dementia”. In: *EMNLP*. 2018. URL: <http://aclweb.org/anthology/D18-1304>.
- [Pui+18] Xavier Puig, Kevin Ra, Marko Boben, Jiaman Li, Tingwu Wang, Sanja Fidler, and Antonio Torralba. “VirtualHome: Simulating Household Activities via Programs”. In: *CoRR* abs/1806.07011 (2018). arXiv: 1806.07011. URL: <http://arxiv.org/abs/1806.07011>.
- [RBR18] T Rohringer, A Budhkar, and F Rudzicz. “Privacy versus artificial intelligence in medicine”. In: *University of Toronto Medical Journal* 96.1 (2018). URL: <https://www.utmj.org/index.php/UTMJ/article/view/1158>.

- [Ren+17] Mengye Ren, Eleni Triantafillou, Sachin Ravi, Jake Snell, Kevin Swersky, Joshua B Tenenbaum, Hugo Larochelle, and Richard S Zemel. “Meta-Learning for Semi-Supervised Few-Shot Classification”. In: *International Conference on Learning Representations (ICLR)*. 2017. arXiv: 1803.00676 [cs.LG]. URL: <https://arxiv.org/abs/1803.00676>.
- [Ren+18] Mengye Ren, Sachin Ravi, Eleni Triantafillou, Jake Snell, Kevin Swersky, Josh B. Tenenbaum, Hugo Larochelle, and Richard S. Zemel. “Meta-Learning for Semi-Supervised Few-Shot Classification”. In: *International Conference on Learning Representations*. 2018. URL: <https://openreview.net/forum?id=HJcSzz-CZ>.
- [Rez+18] Morteza Rezanjad, Gabriel Downs, John Wilder, Dirk B. Walther, Allan D. Jepson, Sven J. Dickinson, and Kaleem Siddiqi. “Scene Categorization from Contours: Medial Axis Based Saliency Measures”. In: *CoRR* abs/1811.10524 (2018). arXiv: 1811.10524. URL: <http://arxiv.org/abs/1811.10524>.
- [RPJ19] F Rudzicz, PA Paprica, and M Janczarski. “Towards international standards for evaluating machine learning”. In: *SafeAI*. 2019. URL: http://ceur-ws.org/Vol-2301/paper_10.pdf.
- [RRPP17] F Rudzicz, S Raimondo, and C Pou-Prom. “Ludwig: A conversational robot for people with Alzheimer’s”. In: *Proceedings of AAIC*. 2017. URL: [https://www.alzheimersanddementia.com/article/S1552-5260\(17\)32864-9/abstract](https://www.alzheimersanddementia.com/article/S1552-5260(17)32864-9/abstract).
- [Rub+18] Yulia Rubanova, Ruian Shi, Roujia Li, Jeff Wintersinger, Amit Deshwar, Nil Sahin, and Quaid Morris. *Reconstructing evolutionary trajectories of mutations in cancer*. 2018. URL: <https://openreview.net/forum?id=Hkjg7N1Pz>.
- [Rud+15] F Rudzicz, R Wang, M Begum, and A Mihailidis. “Speech interaction with personal assistive robots supporting aging-at-home for individuals with Alzheimer’s disease”. In: *ACM Transactions on Accessible Computing* 7.2 (2015). URL: <http://dl.acm.org/citation.cfm?id=2744206>.
- [Rud+16] F Rudzicz, A Frydenlund, S Robertson, and P Thaine. “Acoustic-articulatory relationships and inversion in sum-product and deep-belief networks”. In: *Speech Communication* 79.61-73 (2016). URL: <http://dx.doi.org/10.1016/j.specom.2016.03.001>.
- [RWD17] Geoffrey Roeder, Yuhuai Wu, and David Duvenaud. “Sticking the landing: Simple, lower-variance gradient estimators for variational inference”. In: *Advances in Neural Information Processing Systems (NIPS)*. Ed. by Samy Bengio, Hanna Wallach, Rob Fergus, and S.V.N. Vishwanathan. Vol. 31. Cambridge, MA: MIT Press, 2017. arXiv: 1703.09194. URL: <https://arxiv.org/abs/1703.09194>.

- [RZT18] Amir Rosenfeld, Richard Zemel, and John K Tsotsos. *The Elephant in The Room*. 2018. arXiv: 1808.03305 [cs.CV]. URL: <https://arxiv.org/abs/1808.03305>.
- [San+18] Maziar Sanjabi, Jimmy Ba, Meisam Razaviyayn, and Jason D Lee. “On the Convergence and Robustness of Training GANs with Regularized Optimal Transport”. In: *Advances in Neural Information Processing Systems 31*. Ed. by S. Bengio, H. Wallach, H. Larochelle, K. Grauman, N. Cesa-Bianchi, and R. Garnett. Curran Associates, Inc., 2018, pp. 7091–7101. URL: <http://papers.nips.cc/paper/7940-on-the-convergence-and-robustness-of-training-gans-with-regularized-optimal-transport.pdf>.
- [Sho+16] M Shokrollahi, S Saha, PH Mohammadabadi, F Rudzicz, and A Yadollahi. “Snoring sound detection from respiratory signal”. In: *Proceedings of the 38th Annual International Conference of the IEEE Engineering in Medicine and Biology Society*. 2016. URL: <http://ieeexplore.ieee.org/document/7591413/>.
- [Sho+17] M Shokrollahi, F Rudzicz, D Vena, DT Bradley, and A Yadollahi. “A novel approach for acoustic estimation of neck fluid volume between men and women”. In: *Medical & Biological Engineering & Computing* 56.1 (2017), pp. 113–123. URL: <https://www.ncbi.nlm.nih.gov/pubmed/28676955>.
- [SLF18] Oran Shayer, Dan Levi, and Ethan Fetaya. “Learning Discrete Weights Using the Local Reparameterization Trick”. In: *International Conference on Learning Representations (ICLR)*. 2018. eprint: 1710.07739 (cs.LG).
- [Sne+17] Jake Snell, Karl Ridgeway, Renjie Liao, Brett D Roads, Michael C Mozer, and Richard Zemel. “Learning to Generate Images with Perceptual Similarity Metrics”. In: *International Conference on Image Processing (ICIP)*. 2017.
- [SR16] F Sattar and F Rudzicz. “Principal differential analysis for detection of bilabial closure gestures from articulatory data”. In: *Computer Speech & Language* 36.294-306 (2016). URL: <http://www.sciencedirect.com/science/article/pii/S0885230815000674>.
- [SR17] JH Shen and F Rudzicz. “Detecting anxiety through Reddit”. In: *ACL CLPsych Workshop*. 2017. URL: <http://www.aclweb.org/anthology/W/W17/W17-3107.pdf>.
- [SSZ17] Jake Snell, Kevin Swersky, and Richard Zemel. “Prototypical Networks for Few-Shot Learning”. In: *Advances in Neural Information Processing Systems (NIPS)*. Ed. by Samy Bengio, Hanna Wallach, Rob Fergus, and S.V.N. Vishwanathan. Vol. 31. Cambridge, MA: MIT Press, 2017.

- [Sun+18] Shengyang Sun, Guodong Zhang, Chaoqi Wang, Wenyuan Zeng, Jiaman Li, and Roger Grosse. *Differentiable Compositional Kernel Learning for Gaussian Processes*. Ed. by Jennifer Dy and Andreas Kraus. Stockholmsmässan, Stockholm, Sweden, 2018. arXiv: 1806.04326 [cs.LG]. URL: <https://arxiv.org/abs/1806.04326>.
- [Sun+19] Shengyang Sun, Guodong Zhang, Jiaxin Shi, and Roger Grosse. “FUNCTIONAL VARIATIONAL BAYESIAN NEURAL NETWORKS”. In: *International Conference on Learning Representations*. 2019. URL: <https://openreview.net/forum?id=rkxacs0qY7>.
- [SZ17] Jake Snell and Richard Zemel. “Stochastic Segmentation Trees for Multiple Ground Truths”. In: *Conference on Uncertainty in Artificial Intelligence (UAI)*. 2017.
- [TZU17] Eleni Triantafillou, Richard Zemel, and Raquel Urtasun. “Few-Shot Learning Through an Information Retrieval Lens”. In: *Advances in Neural Information Processing Systems (NIPS)*. Ed. by Samy Bengio, Hanna Wallach, Rob Fergus, and S.V.N. Vishwanathan. Vol. 31. Cambridge, MA: MIT Press, 2017. arXiv: 1707.02610 [cs.LG]. URL: <https://arxiv.org/abs/1707.02610>.
- [Vas+17] JC Vasquez, JR Orozco-Arroyave, R Arora, E Noeth, N Dehak, H Christensen, F Rudzicz, T Bocklet, M Cernak, H Chinaei, J Hannick, PS Nidadavolu, M Yancheva, A Vann, and N Vogler. “Multi-view representation learning via GCCA for multimodal analysis of Parkinson’s disease”. In: *ICASSP*. 2017. URL: <http://ieeexplore.ieee.org/document/7952700/>.
- [Vei+17] Victor Veitch, Zacharie Naulet, Ekansh Sharma, and Daniel M. Roy. *Exchangeable modelling of relational data: checking sparsity, train-test splitting, and sparse exchangeable Poisson matrix factorization*. <https://arxiv.org/abs/1712.02311>. 2017. arXiv: 1712.02311.
- [Vic+17] Paul Vicol, Makarand Tapaswi, Lluís Castrejón, and Sanja Fidler. “MovieGraphs: Towards Understanding Human-Centric Situations from Videos”. In: *CoRR* abs/1712.06761 (2017). arXiv: 1712.06761. URL: <http://arxiv.org/abs/1712.06761>.
- [VR18] Victor Veitch and Daniel M. Roy. “Sampling and Estimation in (Sparse) Exchangeable Graphs”. In: *Annals of Statistics* (2018). To appear. arXiv: 1611.00843.
- [Wam+18] M Wambua, S Raimondo, J Boger, J Polgar, H Chinaei, and F Rudzicz. “Interactive Search through Iterative Refinement”. In: *2nd International Workshop on Conversational Approaches to Information Retrieval (CAIR’18) at SIGIR*. Ann Arbor Michigan, USA, 2018. URL: https://www.academia.edu/37033880/Interactive_search_through_iterative_refinement.

- [Wan+18a] Kuan-Chieh Wang, Paul Vicol, James Lucas, Li Gu, Roger Grosse, and Richard Zemel. “Adversarial Distillation of Bayesian Neural Network Posteriors”. In: *Proceedings of the 35th International Conference on Machine Learning*. Ed. by Jennifer Dy and Andreas Krause. Vol. 80. Proceedings of Machine Learning Research. Stockholmsmässan, Stockholm Sweden: PMLR, 2018, pp. 5190–5199. URL: <http://proceedings.mlr.press/v80/wang18i.html>.
- [Wan+18b] Kuan-Chieh Wang, Paul Vicol, James Lucas, Li Gu, Roger Grosse, and Richard Zemel. “Adversarial Distillation of Bayesian Neural Network Posteriors”. In: *Proceedings of the 35th International Conference on Machine Learning (ICML)*. Ed. by Jennifer Dy and Andreas Kraus. Vol. 80. Proceedings of Machine Learning Research. Stockholmsmässan, Stockholm, Sweden: PMLR, 2018. arXiv: 1806.10317 [cs.LG]. URL: <https://arxiv.org/abs/1806.10317>.
- [Wan+18c] Tingwu Wang, Renjie Liao, Jimmy Ba, and Sanja Fidler. “NerveNet: Learning Structured Policy with Graph Neural Networks”. In: *International Conference on Learning Representations*. 2018. URL: <https://openreview.net/forum?id=S1sqHMZCb>.
- [Wan+18d] Yukang Wang, Yongchao Xu, Stavros Tsogkas, Xiang Bai, Sven J. Dickinson, and Kaleem Siddiqi. “DeepFlux for Skeletons in the Wild”. In: *CoRR* abs/1811.12608 (2018). arXiv: 1811.12608. URL: <http://arxiv.org/abs/1811.12608>.
- [Wan+19a] J Wang, KC Wang, MT Law, F Rudzicz, and M Brudno. “Centroid-based deep metric learning for speaker recognition”. In: *ICASSP*. 2019. URL: <https://arxiv.org/abs/1902.02375>.
- [Wan+19b] Tingwu Wang, Yuhao Zhou, Sanja Fidler, and Jimmy Ba. “Neural Graph Evolution: Automatic Robot Design”. In: *International Conference on Learning Representations*. 2019. URL: <https://openreview.net/forum?id=BkgWHnR5tm>.
- [Wen+18] Yeming Wen, Paul Vicol, Jimmy Ba, Dustin Tran, and Roger Grosse. “Flipout: Efficient Pseudo-Independent Weight Perturbations on Mini-Batches”. In: *International Conference on Learning Representations*. 2018. URL: <https://openreview.net/forum?id=rJNpifWAb>.
- [Wu+17] Yuhuai Wu, Elman Mansimov, Roger B Grosse, Shun Liao, and Jimmy Ba. “Scalable trust-region method for deep reinforcement learning using kronecker-factored approximation”. In: *Advances in Neural Information Processing Systems (NIPS)*. Ed. by Samy Bengio, Hanna Wallach, Rob Fergus, and S.V.N. Vishwanathan. Vol. 31. Cambridge, MA: MIT Press, 2017. arXiv: 1708.05144 [cs.LG]. URL: <https://arxiv.org/abs/1708.05144>.
- [Wu+18a] R Wu, D Liaqat, E De Lara, T Son, F Rudzicz, H Alshaer, P Abed, and A Gershon. “Feasibility of using a smartwatch to intensively monitor patients with COPD”. In: *JMIR Mhealth Uhealth* 6.6 (2018). URL: <https://www.ncbi.nlm.nih.gov/pubmed/29903700>.

- [Wu+18b] R Wu, D Liaqat, E de Lara, T Son, F Rudzicz, H Alshaer, P Abed, and A Gershon. “Feasibility Of Using Android Smartwatches For Nearly Continuous Monitoring Of Patients With COPD”. In: *Proceedings of the American Thoracic Society*. 2018.
- [Wu+18c] Yuhuai Wu, Mengye Ren, Renjie Liao, and Roger Grosse. “Understanding Short-Horizon Bias in Stochastic Meta-Optimization”. In: *International Conference on Learning Representations*. 2018. URL: <https://openreview.net/forum?id=H1MczcgR->.
- [YFR15] M Yancheva, K Fraser, and F Rudzicz. “Using linguistic features longitudinally to predict clinical scores for Alzheimer’s disease and related dementias”. In: *6th workshop on Speech and Language Processing for Assistive Technologies (SLPAT) at Interspeech*. 2015. URL: <http://www.slp.at.org/slp.at2015/papers/yancheva-fraser-rudzicz.pdf>.
- [YLJR19] S Hossain Y Li, K Jamali, and F Rudzicz. “DeepConsensus: using the consensus of features from multiple layers to attain robust image classification”. In: *arXiv preprint arXiv:1811.07266*. 2019. URL: <https://arxiv.org/abs/1904.02293>.
- [Yoo+18] KiJung Yoon, Renjie Liao, Yuwen Xiong, Lisa Zhang, Ethan Fetaya, Raquel Urtasun, Richard Zemel, and Xaq Pitkow. *Inference in probabilistic graphical models by Graph Neural Networks*. 2018. URL: <https://openreview.net/forum?id=rkN1pF1vz>.
- [YR16] M Yancheva and F Rudzicz. “Vector-space topic models for detecting Alzheimer’s disease”. In: *ACL*. 2016. URL: http://www.cs.toronto.edu/~frank/Download/Papers/acl2016_yancheva.pdf.
- [Zel+15] F Zeller, D Harris Smith, JA Duong, M Alanna, E Bagheri, and F Rudzicz. “Social media in human-robot-interaction”. In: *Proceedings of the 2015 International Conference on Social Media & Society*. 2015. URL: <https://smsociety15.sched.com/event/3e4Y/social-media-in-human-robot-interaction>.
- [ZFR16] L Zhou, K Fraser, and F Rudzicz. “Speech recognition in Alzheimer’s disease and in its assessment”. In: *Interspeech*. 2016. URL: http://www.cs.toronto.edu/~frank/Download/Papers/IS16_ASRAD.pdf.
- [Zha+18a] Guodong Zhang, Shengyang Sun, David Duvenaud, and Roger Grosse. “Noisy Natural Gradient as Variational Inference”. In: *Proceedings of the 35th International Conference on Machine Learning (ICML)*. Ed. by Jennifer Dy and Andreas Kraus. Vol. 80. Proceedings of Machine Learning Research. Stockholmsmässan, Stockholm, Sweden: PMLR, 2018. arXiv: 1712.02390 [cs.LG]. URL: <https://arxiv.org/abs/1712.02390>.

- [Zha+18b] Guodong Zhang, Shengyang Sun, David Duvenaud, and Roger Grosse. “Noisy Natural Gradient as Variational Inference”. In: *Proceedings of the 35th International Conference on Machine Learning (ICML)*. Ed. by Jennifer Dy and Andreas Kraus. Vol. 80. Proceedings of Machine Learning Research. Stockholmsmässan, Stockholm, Sweden: PMLR, 2018. arXiv: 1712.02390. URL: <https://arxiv.org/abs/1712.02390>.
- [Zha+18c] Lisa Zhang, Gregory Rosenblatt, Ethan Fetaya, Renjie Liao, William E. Byrd, Raquel Urtasun, and Richard Zemel. *Leveraging Constraint Logic Programming for Neural Guided Program Synthesis*. 2018. URL: <https://openreview.net/forum?id=HJIHtIJvz>.
- [Zha+18d] Lisa Zhang, Gregory Rosenblatt, Ethan Fetaya, Renjie Liao, William Byrd, Matthew Might, Raquel Urtasun, and Richard Zemel. “Neural Guided Constraint Logic Programming for Program Synthesis”. In: *Advances in Neural Information Processing Systems 31*. Ed. by S. Bengio, H. Wallach, H. Larochelle, K. Grauman, N. Cesa-Bianchi, and R. Garnett. Curran Associates, Inc., 2018, pp. 1737–1746. URL: <http://papers.nips.cc/paper/7445-neural-guided-constraint-logic-programming-for-program-synthesis.pdf>.
- [Zha+18e] Lisa Zhang, Gregory Rosenblatt, Ethan Fetaya, Renjie Liao, William E. Byrd, Matthew Might, Raquel Urtasun, and Richard Zemel. “Neural Guided Constraint Logic Programming for Program Synthesis”. In: *Advances in Neural Information Processing Systems (NeurIPS)*. Ed. by Hanna Wallach, Hugo Larochelle, Kristen Grauman, and Nicoló Cesa-Bianchi. Vol. 32. Cambridge, MA: MIT Press, 2018. arXiv: 1809.02840 [cs.LG]. URL: <https://arxiv.org/abs/1809.02840>.
- [Zha+19] Guodong Zhang, Chaoqi Wang, Bowen Xu, and Roger Grosse. “Three Mechanisms of Weight Decay Regularization”. In: *International Conference on Learning Representations*. 2019. URL: <https://openreview.net/forum?id=B1lz-3Rct7>.
- [ZNR18] Z Zhu, J Novikova, and F Rudzicz. “Semi-supervised classification by reaching consensus among modalities”. In: *NeurIPS IRASL*. 2018. URL: <https://arxiv.org/abs/1805.09366>.
- [ZNR19] Z Zhu, J Novikova, and F Rudzicz. “Detecting cognitive impairments by agreeing on interpretations of linguistic features”. In: *NAACL*. 2019. URL: <https://arxiv.org/abs/1808.06570>.
- [ZR15] S Zhao and F Rudzicz. “Classifying phonological categories in imagined and articulated speech”. In: *ICASSP*. 2015. URL: http://www.cs.toronto.edu/~frank/Download/Papers/zhao_icassp2015.pdf.

- [ZRU19] Chris Zhang, Mengye Ren, and Raquel Urtasun. “Graph HyperNetworks for Neural Architecture Search”. In: *International Conference on Learning Representations*. 2019. URL: <https://openreview.net/forum?id=rkgW0oA9FX>.
- [ZTF18] Yuhao Zhou, Makarand Tapaswi, and Sanja Fidler. “Now You Shake Me: Towards Automatic 4D Cinema”. In: *The IEEE Conference on Computer Vision and Pattern Recognition (CVPR)*. 2018.