

shawntan

aspiring computer scientist

online

✉ shawn@wtf.sg
http://blog.wtf.sg
google.scholar
shawntan@github
tanshawn@linkedin

languages

english (proficient)
mandarin

programming

♥ Python, JavaScript,
Java, Ruby, C, Perl

technical skills

HTML & CSS, \LaTeX ,
Linux System
Administration

♂ Tan Jing Shan, Shawn
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research interests

natural language processing, compositional generalisation, graphical models, amortised variational inference, structured prediction

experience

2016-present	Montreal Institute for Learning Algorithms Student Exploring better deep learning architectures and structured prediction methods for modelling natural language.
2014-2016	Speech Recognition Group, National University of Singapore Research Assistant Working on the machine learning aspects of speech recognition using neural networks, with applications to speaker adaptation and noise robustness.
2013-2014	Semantics3 Software/Data Engineer Data scientist / Machine learning engineer related tasks for processing data.
2010-2012	Web Information Retrieval and NLP Group (WING), NUS Undergraduate researcher Did two undergraduate research projects
2008-2009	Singapore Armed Forces Manpower Officer Administrative position managing National Servicemen

education

2018-present	PhD in Computer Science University of Montreal
2016-2018	Masters in Computer Science University of Montreal
2009-2012	Bachelors of Computing (BComp) National University of Singapore
2004-2007	Diploma in Information Technology Ngee Ann Polytechnic, Singapore

publications

conference papers

Recursive Top-Down Production for Sentence Generation with Latent Trees
Shawn Tan, Yikang Shen, Timothy J O'Donnell, Alessandro Sordoni, Aaron Courville
Findings of EMNLP, 2020.

Ordered Neurons: Integrating Tree Structures into Recurrent Neural Networks
Yikang Shen, Shawn Tan, Alessandro Sordoni, Aaron Courville
International Conference on Learning Representations (ICLR), 2019.

Ordered Memory

Yikang Shen, Shawn Tan, Arian Hosseini, Zhouhan Lin, Alessandro Sordoni, Aaron C Courville
Advances in Neural Information Processing Systems, 2019.

Improving explorability in variational inference with annealed variational objectives

Chin-Wei Huang, [Shawn Tan](#), Alexandre Lacoste, Aaron Courville

Advances in Neural Information Processing Systems, 2018.

Towards implicit complexity control using variable-depth deep neural networks for automatic speech recognition

[Shawn Tan](#), Khe Chai Sim

2016 IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP), 2016.

Learning utterance-level normalisation using Variational Autoencoders for robust automatic speech recognition

[Shawn Tan](#), Khe Chai Sim

Spoken Language Technology Workshop (SLT), 2016 IEEE, 2016.

Improving the interpretability of deep neural networks with stimulated learning

[Shawn Tan](#), Khe Chai Sim, Mark Gales

IEEE Workshop on Automatic Speech Recognition and Understanding (ASRU), 2015.

reports

Latent variable language models

[Shawn Tan](#)

Masters' thesis, 2019.

grabsmart: A User-centric Web Information Extraction System

[Shawn Tan](#)

Undergraduate Thesis, 2012.

others

Icentia11K: An Unsupervised Representation Learning Dataset for Arrhythmia Subtype Discovery

[Shawn Tan](#), Guillaume Androz, Ahmad Chamseddine, Pierre Fecteau, Aaron Courville, Yoshua Bengio, Joseph Paul Cohen

arXiv preprint arXiv:1910.09570.

Investigating Biases in Textual Entailment Datasets

[Shawn Tan](#), Yikang Shen, Chin-wei Huang, Aaron Courville

arXiv preprint arXiv:1906.09635.

Inferring Identity Factors for Grouped Examples

[Shawn Tan](#), Christopher J Pal, Aaron Courville

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Generating contradictory, neutral, and entailing sentences

Yikang Shen, [Shawn Tan](#), Chin-Wei Huang, Aaron Courville

arXiv preprint arXiv:1803.02710.

Self-organized hierarchical softmax

Yikang Shen, [Shawn Tan](#), Christopher Pal, Aaron Courville

arXiv preprint arXiv:1707.08588.