YUE DONG

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EDUCATION

McGill University/Mila, Canada *Jan. 2017 - Present*
Ph.D. in Computer Science **CGPA:10/10**
Advisor: Jackie Cheung

University of Ottawa, Canada *Jan. 2015 - Dec. 2016*
Master of Science in Mathematics **CGPA:9.5/10**
Advisors: Vladimir Pestov, Nathalie Japkowicz
Thesis: Higher Order Neural Networks and Neural Networks for Stream Learning

University of Ottawa, Canada *Jan. 2011 - Dec. 2014*
Honours Bachelor of Science, Major in Mathematics and Minor in Computer Science **CGPA:9.6/10**
Advisor: Vladimir Pestov
Honours Thesis: The k-NN Classifier under General Similarity Measure

Xi'an Jiaotong University, China *Sep. 2009 - Sep. 2010*
Clinical Medicine

RESEARCH INTERESTS

Natural Language Processing, Deep Learning, Reinforcement Learning, Computational Linguistics, Automatic Text Summarization

WORK AND RESEARCH EXPERIENCE

Research Intern, Allen Institute for AI, Seattle, USA *June 2020 - Dec. 2020*
- Research on abductive reasoning, commonsense reasoning and controlled text generation.

Part-time Research Intern, Microsoft, Redmond, USA *March 2020 - June 2020*
- Successfully developed facts-aware abstractive summarization models (accepted at EMNLP2020).
- The proposed models can improve the factual consistency by a wide margin from 70% to 90%.

Associate Researcher, Huawei Noah's Ark Lab, Montreal, Canada *Oct. 2018 - Mar. 2019*
- Designed a text simplification framework by explicitly modeling the edits (published at ACL2019).
- Investigated syntactic and semantic soft templates for summarizing scientific articles and medical journals.

PUBLICATIONS

Yue Dong, Shuohang Wang, Zhe Gan, Yu Cheng, Jackie C. K. Cheung and Jingjing Liu. "Multi-Fact Correction in Abstractive Text Summarization." EMNLP, 2020

Yao Lu, Yue Dong and Laurent Charlin. "Multi-XScience: A Large-scale Dataset for Extreme Multi-document Summarization of Scientific Articles." EMNLP, 2020

Meng Cao, Yue Dong, Jiapeng Wu and Jackie C. K. Cheung. "Factual Error Correction for Abstractive Summarization Models." EMNLP, 2020

Yue Dong*, Matt Grenander*, Jackie C. K. Cheung and Annie Louis. "Countering the Effects of Lead Bias in News Summarization via Multi-Stage Training and Auxiliary Losses." EMNLP-IJCNLP, 2019

Yue Dong, Zichao Li, Mehdi Rezagholizadeh and Jackie C. K. Cheung. "EditNTS: An Neural Programmer-Interpreter Model for Sentence Simplification through Explicit Editing." ACL, 2019

Pengfei Liu, Yue Dong*, Jie Fu*, Xipeng Qiu and Jackie C. K. Cheung. "Learning Multi-task Communication with Message Passing for Sequence Learning." AAAI, 2019

Yue Dong*, Yikang Shen*, Eric Crawford, Herke van Hoof and Jackie C. K. Cheung. "BanditSum: Extractive Summarization as a Contextual Bandit." EMNLP, 2018

Koustuv Sinha, Yue Dong, Jackie C. K. Cheung and Derek Ruths."A Hierarchical Neural Attention-based Text Classifier." EMNLP, 2018

Yue Dong and Nathalie Japkowicz. "Threaded ensembles of autoencoders for stream learning." Computational Intelligence. Wiley. Volume34, Issue1, Pages 261-281, February 2018

Yue Dong and Nathalie Japkowicz."Threaded ensembles of supervised and unsupervised neural networks for stream learning." Canadian Conference on Artificial Intelligence. Springer, Cham, 2016 (**best paper award**)

Yue Dong*, Andrei Romascanu* and Jackie C. K. Cheung. "HipoRank: Incorporating Hierarchical and Positional Information into Graph-based Unsupervised Long Document Extractive Summarization." ArXiv preprint, 2020

Yue Dong. "A Survey on Neural Network-Based Summarization Methods." arXiv preprint, 2018

SPECIAL AWARDS

Best Paper Award, 29th Canadian Conference on Artificial Intelligence, Victoria *June, 2016*
Paper: Threaded Ensembles of Supervised and Unsupervised Neural Networks for Stream Learning

Second Place Prize, CS Graduate Student Poster Competition, Ottawa *Mar., 2016*
Poster: Deep Learning in Computer Vision and Visual Arts

SERVICE

- Co-organizer for ACL 2021 NewSum workshop.
- Reviewer for COLING 2020, EMNLP2020, IJCAI 2020, ACL 2020, AAAI 2020, EMNLP 2019, ACL 2019, IJCAI 2019, EMNLP 2019 summarization workshop and Computational Intelligence.
- Co-organizer for CompLing Meetings at McGill Univeristy from Jan., 2018 - Dec., 2018.

PRESENTATIONS AND TALKS

Utilize pre-trained language representation models to develop strong baselines for summarization and dialogue tasks (oral) *Feb., 2020*
LURG reading group at Mila Montreal, Canada

Countering the Effects of Lead Bias in News Summarization (poster) *Nov., 2019*
EMNLP 2019 Hong Kong, China

Introduction to Natural Language Processing (oral) *May, 2019*
AI For Good Summer Lab Montreal, Canada

EditNTS: An Neural Programmer-Interpreter Model for Sentence Simplification through Explicit Editing (oral) *Aug., 2019*
ACL 2019 Florence, Italy

Edit-based Text Simplification (oral) *Mar., 2019*
LURG reading group at Mila Montreal, Canada

Extractive Summarization as a Contextual Bandit (poster) *Aug., 2018*
Deep Learning and Reinforcement Learning Summer School Toronto, Canada

BanditSum: Extractive Summarization as a Contextual Bandit (oral) *Nov., 2018*
EMNLP 2018 Brussels, Belgium

Deep Reinforced Model for Abstractive Summarization (oral) — *Oct., 2017*
CompLing Meeting — Montreal, Canada

Rational Speech Act Theory for Text Summarization (oral) — *July, 2017*
CompLing Meeting — Montreal, Canada

AMR-to-text Generation (oral) — *May, 2017*
CompLing Meeting — Montreal, Canada

Rational Speech Act Theory for Pragmatic Reasoning (oral) — *Mar., 2017*
CompLing Meeting — Montreal, Canada

SCHOLARSHIPS AND AWARDS

Alexander Graham Bell Canada Graduate Scholarship - Doctoral (CGS D) - Accepted *2018-2019*

NSERC Postgraduate Scholarship - Doctoral (PGS D) - Accepted *2017-2018*

FRQNT Doctoral Scholarship - Declined (Rank #1 in all applicants in Mathematics for 2016) *2016*

FRQNT Master's Research Scholarship *2016*

NSERC Canada Graduate Scholarships - CGS Master's *2015*

University of Ottawa Excellence Scholarship *2015 - 2016*

NSERC Undergraduate Student Research Awards (USRA) *Summer 2014*

Dean's Merit Scholarships - Faculty of Science, University of Ottawa *2014*

University of Ottawa Women's Summer Research Award *Summer 2013*

University of Ottawa Merit Scholarship *2013*

University of Ottawa Wong-Ng Scholarship *2013*

University of Ottawa Work/Study Research Award *Summer 2012*

University of Ottawa Yvon Grandchamp Scholarship *2012*

TEACHING EXPERIENCE

COMP251 - Data Structures and Algorithms (McGill University) — Montreal, Canada
Teaching assistant — *Winter 2018*

COMP424 - Artificial Intelligence (McGill University) — Montreal, Canada
Teaching assistant — *Winter 2018*

COMP202 - Foundations of Programming (McGill University) — Montreal, Canada
Teaching assistant — *Fall 2017*

MAT1348 - Discrete Mathematics for Computing (University of Ottawa) — Ottawa, Canada
DGD instructor and homework marker — *Winter 2016, Winter 2014*

MAT1341 - Introduction to Linear Algebra (University of Ottawa) — Ottawa, Canada
DGD instructor and homework marker — *Winter 2016, Fall 2105*

SKILLS

Programming languages: extensive experience with Pyhton (especially PyTorch), R, Java and LaTeX; some experience with TensorFlow, C, Bash script and HTML

Extensive knowledge of: Natural Language Processing, Deep Learning, Reinforcement Learning, Applied Machine Learning, Probability and Statistics, Linear Algebra and Analysis