

Kian Kenyon-Dean

Machine learning engineer, natural language processing specialist

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EXPERIENCE

Radix, Brussels — *Machine learning engineer*

June 2019 - June 2020

Implemented production-ready AI solutions for clients, deployed on AWS cloud infrastructure. Specialized in efficient AI solutions for HR-related problems, such as talent management and job matching for candidates.

Mila Québec AI Institute, Montréal — *AI & NLP researcher*

January 2015 - May 2019

Paid researcher during my undergraduate & master's degrees and each summer of university after 2015. Published several conference papers.

McGill University, Montréal — *Teaching assistant*

September 2017 - December 2018

Graded and designed assignments for the undergraduate AI course (1 semester) and the graduate-level NLP course (2 semesters).

EDUCATION

McGill University, Montréal — *M.Sc. in Computer Science*

September 2017 - May 2019

Machine learning, natural language processing, and reinforcement learning. Supervised by professors Jackie Cheung and Doina Precup.

McGill University, Montréal — *B.A. & Sc. in Cognitive Science*

September 2013 - August 2017

Honor's multidisciplinary program akin to a double major. Course load focused on computer science and linguistics, with a minor in philosophy.

PUBLICATIONS

Deconstructing and reconstructing word embedding algorithms. [arXiv 1911.13280](https://arxiv.org/abs/1911.13280)

E. Newell*, Myself*, J. CK Cheung; Nov. 2019 (*equal contribution).

Conference paper version of Master's thesis, with some additions.

SKILLS

Python, Java, C#, Go, BASH

Git, Github, Gitlab, CI/CD

Agile development, scrum

Design patterns, object oriented programming

Cloud computing, AWS, Terraform, APIs, serverless

Deep learning, Tensorflow, Pytorch, Numpy, Numba, Scikit-learn, Pandas

Giving presentations, simply explaining complex ideas, articulate writer

Quick learner, client-oriented

AWARDS

FRQNT scholarship worth \$24,000 for my M.Sc., granted by Québec

SURA award and more worth \$15,000 combined for my B.A. & Sc., granted by McGill

Outstanding reviewer as a peer-reviewer for the NLP conference [NAACL 2018](#)

LANGUAGES

English - mother tongue

French - working knowledge

Word Embedding Algorithms as Generalized Low Rank Models and their Canonical Form. [Master's thesis](#)

[Myself](#); Apr. 2019.

Theoretical investigation into the fundamental properties that unify different word embedding algorithms.

Sentiment Analysis: It's Complicated! 2018 conference of the North American Association for Computational Linguistics, [NAACL 2018](#)

[Myself*](#), E. Ahmed*, (9 other authors...), D. Ruths; June 2018 (*equal contribution).

Analysis of the empirical problems in sentiment analysis data collection.

Clustering-oriented representation learning with attractive-repulsive loss. Workshop on Network Interpretability for Deep Learning at the Association for Artificial Intelligence, [AAAI 2019](#)

[Myself](#), A. Cianflone, L. Page-Caccia, G. Rabusseau, J. CK Cheung, D. Precup; Dec. 2018.

Investigation on inducing clusterable latent spaces in neural networks.

Resolving Event Coreference with Supervised Representation Learning and Clustering-Oriented Regularization. 7th Joint Conference on Lexical and Computational Semantics, [*SEM 2018](#)

[Myself](#), J. CK Cheung, D. Precup; June 2018.

A model for event-linking across news articles using deep learning.

Verb Phrase Ellipsis Resolution Using Discriminative and Margin-Infused Algorithms. 2016 Conference on Empirical Methods in Natural Language Processing, [EMNLP 2016](#)

[Myself](#), J. CK Cheung, D. Precup; Nov. 2016.

Applications of different machine learning algorithms for VPE resolution.

PRESENTATIONS

Clusterable Latent Spaces in Neural Networks.

Montreal AI Symposium 2018. *Montreal, Aug. 2018.*

Clustering-Oriented Regularization in Neural Networks.

Montreal AI Symposium 2017. *Montreal, Sept. 2017.*

Event Coreference Resolution.

Microsoft Montreal Deep Language Workshop at Mila. *Montreal, Sept. 2017.*

Detecting Verb Phrase Ellipsis.

McGill Undergraduate Research Conference 2015. *Montreal, Oct. 2015.*

BLOG POSTS

Unifying word embeddings and matrix factorization.

[Feb.](#), [Apr.](#), [June 2019](#). A 3-part blog series related to my M.Sc. work on word embeddings.

A simple solution to a big problem in Belgian natural language processing. [Feb. 2020](#).

A summary of how I combine several algorithms to make cross-lingual, domain adapted word embeddings that solve the OOV problem.

REFERENCES

Davio Lournout, CEO of Radix
davio@radix.ai

Dr. Laurent Sorber, CTO of Radix & CTO of Investsuite
laurent@radix.ai

Prof. Jackie Chi Kit Cheung, Primary M.Sc. supervisor
jcheung@cs.mcgill.ca

Prof. Doina Precup, Secondary M.Sc. supervisor
dprecup@cs.mcgill.ca