Jean-Benoit Delbrouck

Born on November 6th, 1990, Belgium (+32) 472 87 84 40 jeanbenoit.delbrouck@gmail.com

EDUCATION

Stanford University, Palo Alto CA, United-States

Postdoctoral researcher

Mons Polytechnique, Mons, Belgium

Doctor of Philosophy, Engineering science, June 2020

Lille 1 University, Lille, France

Master of Science, Computer Science, June 2016 Grade: Distinction

Dublin Institute of Technology, Dublin, Ireland

Bachelor of Science, Computer Science, June 2014 Grade: Distinction

THESIS

Doctoral Thesis: Grounding and pragmatics for human-robot interaction

Supervised by Professor Thierry Dutoit and Stephane Dupont.

Master Thesis: Deep learning for neural machine translation

Conducted during an internship at INRIA Lille. Supervised by Olivier Pietquin, now at Google Brain.

Internship Thesis: Reinforcement learning in stochastic games

Conducted at INRIA Lille. Supervised by Julien Perolat, now at Google Deepmind.

TEACHING

Mons Polytechnique, Mons, Belgium

Signal Processing, Electrical engineering, 2017-2020

Haute Ecole Leonard de vinci, Brussels, Belgium

Artificial Intelligence, Computer Science, 2020

Algorithm, Data structure, Computer Science, 2017-2019

SQL, Computer Science, 2017

https://jbdel.github.io/teaching/

SUPERVISOR

Mons Polytechnique, Mons, Belgium

Robin Jacob, Dense annotations for image captioning (MA2), 2019

Arnaud Vella, Adversarial training for visual question answering (MA2), 2019

Bastien Vanderplaetse, Can adversarial networks learn image captioning without pretraining (MA2), 2019

Michael Rombaux, Learn to collaborate with adversarial training (MA2), 2019

Jason Bury, Reinforcement Learning in Games (MA2), 2017

Arnaud Vella, Automatic image captioning using AI (MA1), 2017

Haute Ecole Leonard de vinci, Brussels, Belgium

Invited Jury Member, 2017-2019

President of the Jury, 2019

PUBLICATIONS As first author:

• An empirical study on the effectiveness of images in Multimodal Neural **Machine Translation**

Proceedings of the 2017 Conference on Empirical Methods in Natural Language

• Modulated Fusion using Transformer for Linguistic-Acoustic Emotion Recognition

Proceedings of the 2020 Conference on Empirical Methods in Natural Language Processing

• A Transformer-based joint-encoding for Emotion Recognition and Sentiment Analysis

Proceedings of Second Grand Challenge and Workshop on Human Multimodal Language (Challenge-HML) - ACL 2020 Best paper award

• Modulating and attending the source image during encoding improves Multimodal Translation

ViGiL, NIPS 2017 Workshop

• Object-oriented Targets for Visual Navigation using Rich Semantic Representations

ViGiL, NeurIPS 2018 Workshop

- Modulated Self-attention Convolutional Network for VQA NeurIPS 2019
- UMONS Submission for WMT18 Multimodal Translation Task

 Proceedings of the Third Conference on Machine Translation, 2018 Challenge
 winner
- Visually Grounded Word Embeddings and Richer Visual Features for Improving Multimodal Neural Machine Translation Proc. of the Grounded Language Understanding 2017
- Multimodal Compact Bilinear Pooling for Multimodal Neural Machine Translation $arXiv,\ 2017$

Languages

French, English, Dutch, Romanian