

# gillesjacobs

NLP, machine learning & data engineer



## about

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[github.com/GillesJ](https://github.com/GillesJ)

## languages

native Dutch  
fluent English  
fluent Spanish  
intermediate French  
notions of German

## programming

Python, Java, R, Perl,  
Prolog, Lisp, CSS3 &  
HTML5

## tools

Scikit-learn,  
Tensorflow, Keras, git,  
R, Matlab/Octave,  
Spark, Pytorch, SQL

## experience

- 2017-now **PhD Researcher on SENTiVENT project** LT3, Ghent University & Solvay Business School/VUB  
Applied machine learning-based NLP with a focus on data-driven deep learning algorithms for information extraction and subjectivity analysis on economic text. Responsible for data collection, visualization and annotation, researching & implementing algorithms, and reporting of results.
- *SENTiVENT project*: Information extraction in economic news for financial applications.
  - System administrator of development and production servers (Linux-based).
  - Information Technology Lead: identifying the technological needs of the research group regarding of software, hardware and data infrastructure.
  - Intellectual property and valorization course for researchers top of class.
- 2018 **Consultancy for AI automated chat moderation** LT3, Ghent University  
Research and develop AI-based automated chat moderation for a chat community start-up.
- 2015-2017 **NLP Junior Researcher on AMiCA project** LT3, Ghent University
- 2015 **NLP Engineering Internship** CCL, KU Leuven + AI-lab, VUB  
*Picto project*: Advanced MSc of Artificial Intelligence internship at the Centrum voor Computerlinguïstiek (Centre for Computational Linguistics). Implementing Word Sense Disambiguation in the Text2Picto tool to aid the translation of natural language into pictographs. Additional internship experience at AI-lab, VUB for implementing English and Spanish Fluid Construction Grammar.

## education

- 2014-2015 **Advanced M.Sc. Artificial Intelligence** KU Leuven  
magna cum laude  
Specialization in Speech and Language Technologies.
- 2013-2014 **M.A. Computational and Formal Linguistics** KU Leuven  
magna cum laude
- 2010-2013 **B.A. Linguistic and Literature: Spanish and English** KU Leuven  
cum laude  
Erasmus scholarship Universidad de Sevilla, Seville, Spain
- 2004-2010 **Latijn-Wiskunde Talen** Sint-Albertus College Haasrode

## certifications & training

2019	<b>Deep Learning Specialization</b> Deep learning MOOC course by Deeplearning.ai.	Coursera
2017	<b>Machine Learning Course</b> Practical machine learning MOOC course.	Coursera

## awards & grants

2017	<b>Aspirant Strategic Basic Research Grant</b> Granted an aspirant PhD fellowship grant The Research Foundation Flanders (FWO) based on my resume and proposal for the SENTiVENT project for information extraction in business news.	Research Foundation Flanders
2015	<b>Accenture Tech Consultancy Challenge</b> Finalist in the Accenture Tech Consultancy Challenge held at KU Leuven. Provide business and technical consultancy to an ISP. Selected for hiring.	Accenture

## volunteering

2017-now	<b>Hackerspace.Gent Funding Volunteer</b> Managing social media accounts, co-organizing events and setting up data infrastructure for Hackerspace.Gent.	Hackerspace.Gent
2014-2015	<b>Student Representative for Master of Artificial Intelligence</b> Student Representative in the Permanent Education Commission for the Advanced M.Sc. of Artificial Intelligence programme. Represent students' interests at education evaluation and planning meetings.	KU Leuven
2013	<b>English Language Instructor</b> Responsible for teaching English proficiency and language skills, preparing language teaching course material & assisting in recreational activities.	Taalkampen DePauw, Leeds, UK

## communication skills

2016-now	<b>Oral and Poster Presentations</b> Presented research findings at several international conferences.	
2017-now	<b>Social media campaigns</b> Responsible for social media visibility for the LT3 research group on multiple platforms (LT3 homepage, Facebook & Twitter). Scientific communication on the UGentNLP Twitter account. Hackerspace.Gent social media campaigns and event organization (Hackerspace.gent homepage, Meetup.com, Instagram, Facebook)	LT3 + UGentNLP + Hackerspace.Gent

## academic activities

### press & communications

Technologia kontra hejt Krzysztof Domaradzki Forbes Magazine Poland (Mar. 2019) pp. 14–19. 2019
Can this technology put an end to bullying? Sarah Griffiths BBC.com (Feb. 2019). The British Broadcasting Corporation, 2019
Hoe een algoritme kan helpen tegen pesten Dirk Draulans Knack 46 (Nov. 2018) pp. 28–28. 2018

AI tries to help you protect your children from cyberbullying

Alice Klein

NewScientist.com (Oct. 2018). *New Scientist Ltd., 2018*

AI could be trained to spot cyberbullying on social media and get harmful content removed before it can inflict any damage on its victim

Joe Pinkstone

DailyMail.co.uk (Oct. 2018). *Daily Mail and General Trust, 2018*

## teaching

- |           |  |       |
|-----------|--|-------|
| 2018-now  | <b>Advanced Python for Natural Language Processing</b>   | UGent |
|           | Made course material and taught class in advanced Python programming for NLP in the CALM Advanced Masters programme.   |       |
| 2017-2018 | <b>Processing Language with Python</b>   | UGent |
|           | Made course material and taught an introduction to programming with Python with a focus on automatic text processing in the CALM Advanced Masters programme. |       |
| 2017-2018 | <b>Supervise BA Thesis "Qualitative analysis of sentiment analysis for economic news."</b>   | UGent |
|           | Supervisor for Lien De Wulf for BA thesis "Qualitative analysis of sentiment analysis for economic news: an analysis of economic newspaper articles".        |       |
| 2016-2017 | <b>Supervise BA Thesis "Semantische frames van events in economisch nieuws."</b>   | UGent |
|           | Supervisor for Quinten Meiresonne for BA thesis "Semantische frames van events in economisch nieuws: literatuur-en corpusstudie".                            |       |

## reviewing & scientific committees

- |      |   |         |
|------|---|---------|
| 2019 | <b>10th Workshop on Computational Approaches to Subjectivity, Sentiment &amp; Social Media Analysis</b> | WASSA   |
|      | Seated on scientific committee reviewed submission WASSA10-31.  |         |
| 2019 | <b>European Journal for Applied Linguistics</b>   | EUJAL   |
|      | Reviewed submission EUJAL-2019-0002.  |         |
| 2019 | <b>Journal of Neural Computing and Applications</b>   | NCAA    |
|      | Reviewed submission NCAA-D-19-00239.  |         |
| 2019 | <b>Semeval 2019 Task 5</b>  | Semeval |
|      | Reviewed submission SEMEVAL-2019-T5-194.  |         |
| 2018 | <b>Journal of Cyberpsychology</b>   | CPS     |
|      | Reviewed submission CPS2018-084   |         |
| 2018 | <b>6th Conference on CMC and Social Media Corpora</b>   | CMC     |
|      | Seated on scientific committee and reviewed submission CMC06-13.  |         |
| 2017 | <b>8th Workshop on Computational Approaches to Subjectivity, Sentiment &amp; Social Media Analysis</b>  | WASSA   |
|      | Reviewed submission WASSA08-17.   |         |

## presentations & conferences

Fill this in. Categories: Invited, main speaker, co-presenter, chair, attended.

## interests

**professional:** natural language processing, deep learning, machine learning, data science, financial technology

**personal:** generative art, swimming, cybersecurity

## publications

## article in peer-reviewed journal

### Automatic Classification of Participant Roles in Cyberbullying

G. Jacobs, C. Van Hee, E. Lefever, V. Hoste  
*Natural Language Engineering (Feb. 2019). 2019*

### Automatic Detection of Cyberbullying in Social Media Text

Cynthia Van Hee, Gilles Jacobs, Chris Emmery, Bart Desmet, Els Lefever, Ben Verhoeven, Guy De Pauw, Walter Daelemans, Veronique Hoste  
*PLOS ONE 13 (2018) p. 22. Public Library of Science, 2018*

## peer-reviewed conferences/proceedings

### LT3 at SemEval-2019 Task 5 : multilingual detection of hate speech against immigrants and women in Twitter (hatEval)

Nina Bauwelinck, Gilles Jacobs, Veronique Hoste, Els Lefever  
*Proceedings of the 13th International Workshop on Semantic Evaluation (SemEval-2019), 2019, Minneapolis, Minnesota, USA*

### Economic Event Detection in Company-Specific News Text

Gilles Jacobs, Els Lefever, Véronique Hoste  
*Proceedings of the First Workshop on Economics and Natural Language Processing, 2018, Melbourne, Australia*

### Towards an integrated pipeline for aspect-based sentiment analysis in various domains

Orphée De Clercq, Els Lefever, Gilles Jacobs, Tijl Carpels, Veronique Hoste  
*Proceedings of the 8th Workshop on Computational Approaches to Subjectivity, Sentiment and Social Media Analysis, 2017, Copenhagen, Denmark*

### In the eye of the beer-holder : lexical descriptors of aroma and taste sensations in beer reviews

Els Lefever, Liesbeth Allein, Gilles Jacobs  
*HUSO 2017 : The Third International Conference on Human and Social Analytics, 2017, Nice, France*

### Improving Text-to-Pictograph Translation Through Word Sense Disambiguation

Leen Sevens, Gilles Jacobs, Vincent Vandeghinste, Ineke Schuurman, Frank Van Eynde  
*Proceedings of the Fifth Joint Conference on Lexical and Computational Semantics, 2016, Berlin, Germany*

### Mental distress detection and triage in forum posts: the LT3 CLPsych 2016 shared task system

Bart Desmet, Gilles Jacobs, Veronique Hoste  
*Proceedings of the Third Workshop on Computational Linguistics and Clinical Psychology, 2016, San Diego, US*

## other publications

### Hello ABSA! Collaboration between LT3 and Hello Customer to develop an aspect-based sentiment analysis pipeline

Orphée De Clercq, Els Lefever, Gilles Jacobs, Tijl Carpels, Véronique Hoste  
*2017, Tilburg, The Netherlands*

### Cyberbullying Detection in Social Media

Gilles Jacobs, Cynthia Van Hee, Chris Emmery, Bart Desmet, Els Lefever, Ben Verhoeven, Guy De Pauw, Walter Daelemans, Veronique Hoste  
*2017, Leuven, Belgium*

### Classifier optimization for cyberbully detection: finding the needle in the haystack

Gilles Jacobs  
*2016, Nijmegen, The Netherlands*

### Word sense disambiguation in text-to-pictograph translation

Gilles Jacobs, Leen Sevens, Vincent Vandeghinste, Ineke Schuurman, Frank Van Eynde  
*2015, Amsterdam, The Netherlands*