## Timothee Mickus

#### PERSONAL DATA

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#### **PUBLICATIONS & COMMUNICATIONS**

PEER-REVIEWED PUBLICATIONS

"About Neural Networks and Writing Definitions" **ACCEPTED** 

T. MICKUS, D. PAPERNO & M. CONSTANT; oral online presentation at DSNA 2021 conference; accepted as a publication to

Dictionaries

"A Game Interface to Study Semantic Grounding in Text-Based Models" AUG 2021

T. MICKUS, M. CONSTANT & D. PAPERNO; oral online presentation at Games and NLP workshop (colocated with IEEE COG).

URL: https://ieee-cog.org/2021/assets/papers/paper\_268.pdf

**DEC 2020** "What Meaning-Form Correlation Has to Compose With"

T. MICKUS, T. BERNARD & D. PAPERNO; oral online presentation at COLING 2020 conference.

URL: https://www.aclweb.org/anthology/2020.coling-main.333/

"Génération Automatique de Définitions pour le Français" **IUN 2020** 

T. MICKUS, M. CONSTANT & D. PAPERNO; oral online presentation at TALN 2020 conference.

URL: https://hal.archives-ouvertes.fr/hal-02784756

JAN 2020 "What do you mean, BERT? Assessing BERT as a Distributional Semantics Model"

T. MICKUS, D. PAPERNO, M. CONSTANT & K. VAN DEEMTER; oral presentation at Scil 2020 conference.

URL: https://scholarworks.umass.edu/scil/vol3/iss1/34/

"Mark my Word: A Sequence-to-sequence Approach to Definition Modeling" **SEP 2019** 

T. MICKUS, D. PAPERNO & M. CONSTANT; oral presentation at DL4NLP workshop (NODALIDA 2019); presented as a poster

to CLIN 2020. URL: http://svn.nlpl.eu/outreach/dl4nlp/2019/W19-0501.pdf

"Distributional Effects of Gender Contrasts Across Categories" JAN 2019

T. MICKUS, O. BONAMI & D. PAPERNO; presented as a poster at Scil 2019 conference.

URL: https://scholarworks.umass.edu/scil/vol2/iss1/19/

### PEER-REVIEWED ABSTRACTS

"Striking out on one's own: Idiosyncratic frequency as a measure of derivation vs inflection" JUN 2021

M. COPOT, T. MICKUS & O. BONAMI; oral online presentation at PARADIGMO 2 Workshop.

### EDUCATION

200,	
INTERNSHIPS	
FEB 2020-MAR 2020	NLP Intern at Aist Airc, Tokyo
	Reinforcement learning implementation of communication games. Experiments to determine necessary factors for grounded compositional language emergence, study of existing metrics of compositionality.
Nov 2017-Jul 2018	NLP Intern at Université Paris Diderot, Paris
	Distributional Semantics Models approaches applied to French morphology of gender. Use of word embeddings and statistical analysis to explain facts relevant to gender assignment of French agent nouns.
Jan 2016-Jun 2016	NLP Intern at Université Paris Diderot, Paris
	Compute and compare average conditional entropy over n-grams for two corpora (French and Mauritian Creole).
Jun 2015-Sep 2015	NLP Intern at LIPN, UNIVERSITÉ PARIS 13 , Paris area
	Corrective maintenance for the Hybride project (ANR-11-BS002-002 2011-2015) for extracting symptoms from scientific articles on rare diseases. Hyperparameters optimisation (Java & Bash).
SCHOOL CURRICULUM	
OCT 2018-MAR 2022	PHD. in COMPUTER SCIENCE, ATILF, Université de Lorraine, Nancy
	TITLE: "Generating Definitions and Semantic properties of words with Deep Learning and Rich

Lexical Resources"

Using NLG to study the relation between distributional semantic representations and traditional dictionary definitions.

SUMMER SCHOOL in MACHINE LEARNING, DeepLearn 2019, Warsaw **JUL 2019** 

**JUL 2018** Master of Science in Computational Linguistics, Université Paris Diderot, Paris

GPA: 16.95/20, summa cum laude, rank not available. Thesis subject: "Grammatical Gender Contrasts in

French: a distributional semantic approach".

JUL 2016 Undergraduate Degree in Computational Linguistics, Université Paris Diderot, Paris

GPA: 15.287/20, cum laude, ranked 1st. End-of-year project: "Word Sense Disambiguition using a Semantic

Network".

JUL 2015 Bachelor of Science in Computational Linguistics, Université Paris Diderot, Paris

GPA: 16.66/20, summa cum laude, ranked 1st. End-of-year project: "Levenshtein distance-based spell-

checker".

# SCIENTIFIC OUTREACH

TEACHING	
Nov 2020-Feb 2021	Lectures on <b>Word Embeddings</b> and <b>Data Mining</b> , at UNIVERSITÉ DE LORRAINE as part of the "Lexical Resources" class of the M.Sc. in NLP.
OCT 2020-JAN 2021	Practical Lectures on <b>Programming</b> (Python), at UNIVERSITÉ DE LORRAINE as part of the "Algorithmics & Programming" class of the M.Sc. in NLP.
OCT 2020-DEC 2020	Practical Lectures on <b>Web Development</b> , at UNIVERSITÉ DE LORRAINE нтм., css, JavaScript.
Nov 2020-Dec 2020	Practical Lectures on <b>Office Automation</b> , at UNIVERSITÉ DE LORRAINE Topics covered: Word processor software, Web search.
Nov 2020	Practical Lectures on <b>Shell</b> and <b>ETEX</b> , at UNIVERSITÉ DE LORRAINE as part of the "Lexical Resources" class of the M.Sc. in NLP.
Nov 2019–Jan 2020	Lectures on Word Embeddings and Data Mining, at UNIVERSITÉ DE LORRAINE as part of the "Lexical Resources" class of the M.Sc. in NLP.
OCT 2019–JAN 2020	Practical Lectures on <b>Programming</b> (Python), at UNIVERSITÉ DE LORRAINE as part of the "Algorithmics & Programming" class of the M.Sc. in NLP.
Aug 2019	Tutor for PYTHON4NLP Summer School, Nancy Setting up working environments (virtual machines, miniconda, git). Providing help and guidance to attendees on presented python APIS & libraries (NLTK, BeautifulSoup, spacy, sklearn).
Nov 2018-Dec 2018	Lectures on Word Embeddings and Multilingual Resources, at UNIVERSITÉ DE LORRAINE as part of the "Lexical Resources" class of the M.Sc. in NLP.
OTHER ADMINISTRATIV	ve Duties
Jun 2021-Aug 2022	Organizer for the SemEval 2022 Shared Task on Comparing Embeddings & Dictionaries  URL: https://git.atilf.fr/tmickus/codwoe
APR 2021-NOW	Member of the strategic committee "Université - Recherche - Santé"
MAR 2021-JUL 2021	Organizer for the Cafétal NLP Reading Group, at ATILF
Jun 2020–Aug 2020	Supervised two NLP interns (Masters 1 students) Internship topic: preliminary work for establishing comparable sets of word embeddings.
FEB 2019-JUL 2019 PUBLIC OUTREACH	Organizer for the NLP Reading Group, at UNIVERSITÉ DE LORRAINE
Jul 2021-Now	Personal blog: "My PhD, explained to my folks."
Work Experience	
AUG 2018-SEP 2018	Web & NLP Engineer at ELDA, Paris; Development—Web Annotation Interface
	Implementation of a web document annotation application & data-mining.
Nov 2017-Jul 2018	NLP Data Scientist at Esprits Collaboratifs, Paris area; $NLP-R\mathcal{E}D$
	Word embeddings (word2vec), statistical analysis, clustering, classification & probabilistic models.
Nov 2015-Nov 2017	Software Contractor at Spirica, Paris; Development—Life Insurance Web Application
OCT 2015-Nov 2017	R&D Engineer at MIDDLEWARE FACTORY, Paris area; Computer Programming $-R\mathcal{E}D$
PRACTICAL SKILLS	
COMPUTER SKILLS	Python 3 (pytorch, NLTK, django), Java 8 (JEE, JSF), JavaScript (jQuery), C/++, Bash (sed, awk, grep), R, XML, XSD, XPath, CSS, HTML, SQL, Unix (Ubuntu), OpenOffice, LATEX
LANGUAGES	French & English (native), German & Japanese (basic knowledge); notions of Classical Nahuatl, Latin, Ancient Greek, Arabic