# VILÉM ZOUHAR

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### **EDUCATION**

## Charles University in Prague

2017/18 - 2019/20

BSc. in Computer Science

Specialization in Computational linguistics

Thesis Enabling Outbound Machine Translation

Saarland University + Groningen University 2020/21 - exp. 2021/22

MSc. in Language Science and Technology

Double degree programme

Thesis TBD



#### SELECTED ACADEMIC PROJECTS AND PUBLICATIONS

Google Scholar

Providing Backtranslation Improves Users Confidence in MT, Not Quality

NAACL 2021

Vilém Zouhar, Michal Novák, Matúš Žilinec, Ondřej Bojar, Mateo Obregón, Robin L. Hill,
Frédéric Blain, Marina Fomicheva, Lucia Specia, Lisa Yankovskaya

Sampling and Filtering of Neural Machine Translation Distillation Data

NAACL SRW 2021

Vilém Zouhar

Leveraging Neural Machine Translation for Word Alignment

PBML 116

Vilém Zouhar, Daria Pylypenko

WMT20 Document-Level Markable Error Exploration

WMT20

Vilém Zouhar, Tereza Vojtěchová, Ondřej Bojar

Extending Ptakopět for MT User Interaction Experiments

PBML 115

Vil'em~Zouhar,~Michal~Nov'ak

Outbound Translation User Interface Ptakopet: A Pilot Study Vilém Zouhar, Ondřej Bojar

LREC 2020

vnem Zoanar, Onarej Bojar

A Collection of Machine Learning Excercises

2018/2019

 $50\ pages\ of\ ML\ tasks\ in\ R;\ full\ version\ available\ per\ request\ (used\ as\ teaching\ material)$ 

Paper on machine translation evaluation

in review

Survey of knowledge intensive NLP tasks with knowledge bases

in review

Paper on machine translation with eyetracking and EEG

in writing

Paper on dimension reduction for knowledge intensive NLP tasks

in writing

#### TECHNICAL KNOWLEDGE

#### LANGUAGE PROFICIENCY

Programming	Python, JS/TS, Rust, R, C/C++	Czech	Native
Toolkits	PyTorch, TF (basics), NLTK, Marian NMT	English	C1-C2
Misc.	Linux, Matplotlib, LaTeX	German	B2 (in development)
	Always trying to learn more	Polish	A1

#### WORK EXPERIENCE

 ${\bf Spoken\ Language\ Systems\ group\ (student\ research\ assistant)}$ 

2021-present

- University of Saarland (Germany)
- Language modelling with external source of information

Statistical Natural Language Processing class (tutor)

summer 2021

- University of Saarland (Germany)
- Prepared class material

Institute of Formal and Applied Linguistics (student research assistant) 2018-present - Charles University (Czech Republic) - Machine translation related projects - Bergamot project (in-browser MT) - Psycholinguistic project consultation - Miscellaneous research tasks Previo (intern software dev) summer 2018 - Development of multilayer CMS using JS, PHP, Zend and MySQL BIM Project (intern software dev)  $\operatorname{summer}\ 2017$ - Development of plugins for the Archi CAD suite with C++/Boost and C# Web development 2015-2017 - Participation in several commercial website projects using the PHP/JS/HTML/CSS stack - Brno bez vizuálního smogu, MrFox, Velab, Intimedcare EXTRA-CURRICULAR Academic senate 2018-2020 - Member of the Academic Senate at Charles University Faculty of Mathematics and Physics Game Jams 2015-2020 - Various game jams, mostly Ludum Dare - Several games programmed and presented in limited time Misc. projects present - Small projects either for convenience, or as a hobby; code hosted at GitHub Kasiopea 2017-2019 - Organization of Kasiopea, an annual coding competition for talented highschool students