# 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. 2022/23

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

Leveraging Neural Machine Translation for Word Alignment PBML 116 accepted

Vilém Zouhar, Daria Pylypenko

WMT20 Document-Level Markable Error Exploration WMT20 published

Vilém Zouhar, Tereza Vojtěchová, Ondřej Bojar

Extending Ptakopět for MT User Interaction Experiments PBML 115 published

Vilém Zouhar, Michal Novák

Outbound Translation User Interface Ptakopet: A Pilot Study

LREC 2020 published

Vilém Zouhar, Ondřej 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 writing

Paper on machine translation with eyetracking in writing

#### TECHNICAL KNOWLEDGE

#### LANGUAGE PROFICIENCY

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

#### WORK EXPERIENCE

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)

summer 2017

2015-2017

- Development of plugins for the ArchiCAD suite with C++/Boost and C#

Web development

- Participation in several commercial website projects using the  $\mathrm{PHP}/\mathrm{JS}/\mathrm{HTML}/\mathrm{CSS}$  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