# ZDENĚK KASNER

### **PhD Student in Computational Linguistics**

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- @zdenekkasner
- github.com/kasnerz

## **EDUCATION**

### PhD in Computational Linguistics

#### Institute of Formal and Applied Linguistics, Faculty of Mathematics and Physics, Charles University

## since 10/2019

Prague, Czechia

• thesis: Domain Adaptation for Natural Language Generation

• supervisor: Ondřej Dušek

### Master in Artificial Intelligence

#### Faculty of Electrical Engineering, Czech Technical University in Prague

**1** 07/2016 - 06/2019

Prague, Czechia

• thesis: Incorporating Language Models into Non-autoregressive Neural Machine Translation

• dean award & minor degree in Computer Vision

#### Erasmus+

#### Faculty of Engineering Science, Katholieke Universiteit Leuven

**1** 09/2017 - 02/2018

courses from Master of Al

### **Bachelor in Computer Science**

#### Faculty of Information Technology, CTU in Prague

**1** 09/2013 - 06/2016

Prague, Czechia

• thesis: Flow-Based Classification of Devices in Computer Networks

graduated with honors

## WORK EXPERIENCE

## Research & Software Development

#### Robot Perception Group, CIIRC CTU in Prague

**⋒** 01/2019 − 09/2019

Prague, Czechia

Natural language understanding for an automated production line and a collaborative robotic workspace.

### Software Development

#### Al Center, FEE CTU in Prague

**⋒** 07/2016 − 08/2017

Prague, Czechia

Implementing a search engine with intermodal routing for public transport.

## Software Development & Research

#### **CESNET**

**₩** 04/2015 - 07/2016

Prague, Czechia

Developing a module for device classification in a high-throughput system for network traffic analysis (NEMEA).

## **INTERNSHIPS**

### PhD Internship

### Mila - Quebec Al Institute

Research on autonomous web navigation with LLMs under supervision of Siva Reddy.

### PhD Internship

#### **Heriot-Watt University**

# 10/2021 - 12/2021 ♥ Edinburgh, UK

Research on natural language generation under supervision of Ioannis Konstas.

### Research Internship

#### KDDI Research, Inc.

Developing an augmented reality annotation system for optical see-through head-mounted displays.

## VOLUNTEERING

#### **BEST Prague**

#### **Board of European Students of Technology**

Communication and cooperation with students of European universities of technology, organizing events (courses, engineering competitions).

## SKILLS & KNOWLEDGE

Python

Bash

Javascript

C | C++

Machine Learning

NLP | Computer Vision

Game Theory

Genetic Algorithms

Optimization

**Computer Science** 

## LANGUAGES

Czech **English** French

Dutch



## CERTIFICATES

• Certificate of Proficiency in English (C2) -Cambridge Level 3 Certificate in ESOL International

## **SELECTED PUBLICATIONS**

### Conference Proceedings

- Kasner, Z., Garanina, E., Platek, O., & Dusek, O. (2023). TabGenie: A toolkit for table-to-text generation. *Proceedings of the ACL (Volume 3: System Demonstrations)*, 444–455.
- Kasner, Z., Konstas, I., & Dušek, O. (2023). Mind the Labels: Describing Relations in Knowledge Graphs With Pretrained Models. Proceedings of the EACL, 2390–2407.
- Kasner, Z., & Dušek, O. (2022). Neural Pipeline for Zero-Shot Datato-Text Generation. *Proceedings of the ACL (Volume 1: Long Papers)*, ACL 2022, 3914–3932.
- Kasner, Z., Mille, S., & Dušek, O. (2021). Text-in-Context: Token-Level Error Detection for Table-to-Text Generation. *Proceedings of the INLG, INLG 2021*, 259–265.
- Kasner, Z., & Dušek, O. (2020a). Data-to-Text Generation with Iterative Text Editing. *Proceedings of the INLG*, *INLG* 2020, 60–67.
- Kasner, Z., & Dušek, O. (2020b). Train Hard, Finetune Easy: Multilingual Denoising for RDF-to-text Generation. *Proceedings of the 3rd International Workshop on Natural Language Generation from the Semantic Web (WebNLG+)*, 171–176.
- Dušek, O., & Kasner, Z. (2020). Evaluating Semantic Accuracy of Data-to-Text Generation with Natural Language Inference. Proceedings of the INLG, INLG 2020, 131–137.
- Libovický, J., Kasner, Z., Helcl, J., & Dušek, O. (2020). Expand and Filter: CUNI and LMU Systems for the WNGT 2020 Duolingo Shared Task. Proceedings of the Fourth Workshop on Neural Generation and Translation, 153–160.

## Preprints

 Kasner, Z., Libovický, J., & Helcl, J. (2020). Improving Fluency of Non-Autoregressive Machine Translation.

## **TEACHING**

Introduction to Machine Learning with Python Faculty of Mathematics and Physics, Charles University

**1** 09/2023 - 02/2024

Prague, Czechia

## Statistical Dialogue Systems

Faculty of Mathematics and Physics, Charles University

**1** 09/2022 - 02/2023

Prague, Czechia

### Introduction to Linux

Faculty of Mathematics and Physics, Charles University

**1** 02/2022 - 06/2022

♥ Prague, Czechia

Programming I & Introduction to Algorithms
Faculty of Mathematics and Physics, Charles University

**1** 09/2020 - 02/2021

Prague, Czechia

### **COURSES**

## DeepLearn

#### **IRDTA**

**∰** 07/2021

♦ Las Palmas, Spain

Participanting in a series of lectures and workshops on recent advancements in deep learning.

## **RESEARCH INTERESTS**

#### Natural Language Generation

- Domain Adaptation
- Evaluation
- Story Generation

#### Miscellaneous

- Model interpretability
- Reasoning
- Autonomous web navigation

### **ORGANIZATION**

- PracticalD2T Workshop @ INLG 2023
   Main organizer
- SIGDIAL & INLG 2023 Local organizer

### **AWARDS**

- Outstanding scientific results Charles University Grant Agency for my personal grant project 2020-22 (honorable mention)
- Outstanding reviewer at EACL 2021
- ➡ Best short paper at INLG 2020 (Dušek and Kasner, 2020)

## **REFEREES**

### Ondřej Dušek

- PhD Advisor
- odusek@ufal.mff.cuni.cz

#### Siva Reddy

- PhD Internship Supervisor

#### **Ioannis Konstas**

- PhD Internship Supervisor
- ✓ i.konstas@hw.ac.uk

#### Jindřich Helcl

- Master Thesis Supervisor