



Martin Fajčík

NLP Researcher

Education

Martin Fajčík

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Web

<https://www.fit.vut.cz/person/ifajcik/en>

<https://mfajcik.github.io/>

Google Scholar

<https://scholar.google.com/citations?user=KUU5fUUAAAAJ&hl=en&oi=sra>

GitHub

<https://github.com/MFajcik>

Linkedin

<https://www.linkedin.com/in/mfajcik/>

Brno University of Technology / Ph.D. Candidate

Sept 2017 – , BRNO, CZECHIA

Advisor: Pavel Smrž

Ph.D. thesis focusing on Question Answering

Topics: Extractive QA, Open-Domain QA, Bias in Open-Domain QA, Document Retrieval

Brno University of Technology / M.Sc. Intelligent Systems

Sept 2015 – June 2017, BRNO, CZECHIA

M.Sc. thesis focusing on the stochastic optimization applied in automated processor verification

Brno University of Technology / B.Sc. Information Technology

Sept 2012 – June 2015, BRNO, CZECHIA

B.Sc. thesis focusing on the development of static analysis and quick fix functionality for CodAL architecture description language

Jobs

Brno University of Technology / Research Assistant

Sept 2017 – , BRNO, CZECHIA

Advisor: Pavel Smrž

Research assistant & Ph.D. candidate

IDIAP Research Institute / Research Assistant

Nov 2021 – Dec 2022, MARTIGNY, SWITZERLAND

Supervisor: Petr Motlíček

Research related to Criteria H2020 Project

Codasip / Java/Python Developer

June 2015 – Oct 2017 BRNO, CZECHIA

Development of Eclipse IDE plugins, CodAL language editor, python/bash scripts, simple javascript front-ends based on doT.js. Design of miscellaneous Java APIs.

Publications

Fajcik, M., Singh, M., Zuluaga-Gomez, J., Villatoro-Tello, E., Burdisso, S., Motliceck, P., & Smrz, P., 2022. [IDIAPers @ Causal News Corpus 2022: Extracting Cause-Effect-Signal Triplets via Pre-trained Autoregressive Language Model](#). In *Proceedings of the 5th Workshop on Challenges and Applications of Automated Extraction of Socio-political Events from Text (CASE)* (pp. 70–78).

Burdisso, S., Zuluaga-Gomez, J., Villatoro-Tello, E., Fajcik, M., Singh, M., Smrz, P., & Motliceck, P., 2022. [IDIAPers@ Causal News Corpus 2022: Efficient Causal Relation Identification Through a Prompt-based Few-shot Approach](#). In *Proceedings of the 5th Workshop on Challenges and Applications of Automated Extraction of Socio-political Events from Text (CASE)* (pp. 61–69).

Fajcik, M., Motliceck, P., & Smrz, P., 2022. [Claim-Dissector: An Interpretable Fact-Checking System with Joint Re-ranking and Veracity Prediction](#). *arXiv preprint arXiv:2207.14116*.

Fajcik, M., Jon, J., & Smrz, P., 2021. [Rethinking the Objectives of Extractive Question Answering](#). In *Proceedings of the 3rd Workshop on Machine Reading for Question Answering* (pp. 14–27).

Fajcik, M., Docekal, M., Ondrej, K. and Smrz, P., 2021. [R2-D2: A Modular Baseline for Open-Domain Question Answering](#). In *Findings of the Association for Computational Linguistics: EMNLP 2021* 2021

Fajcik, M., Docekal, M., Ondrej, K. and Smrz, P., 2021. [Pruning the Index Contents for Memory Efficient Open-Domain QA](#). *arXiv preprint arXiv:2102.10697*.

Min, S., Boyd-Graber, J., Alberti, C., Chen, D., Choi, E., Collins, M., Guu, K., Hajishirzi, H., Lee, K., Palomaki, J., Raffel, C., Roberts, A., Kwiatkowski, T., Lewis, P., Wu, Y., Küttler, H., Liu, L., Minervini, P., Stenetorp, P., Riedel, S., Yang, S., Seo, M., Izacard, G., Petroni, F., Hosseini, L., De Cao, N., Grave, E., Yamada, I., Shimaoka, S., Suzuki, M., Miyawaki, S., Sato, S., Takahashi, R., Suzuki, J., Fajcik, M., Docekal, M., Ondrej, K., Smrz, P., Cheng, H., Shen, Y., Liu, X., He, P., Chen, W., Gao, J., Oguz, B., Chen, X., Karpukhin, V., Peshterliev, S., Okhonko, D., Schlichtkrull, M., Gupta, S., Mehdad, Y. and Yih, W., 2021. [NeurIPS 2020 EfficientQA Competition: Systems, Analyses and Lessons Learned](#). In *Proceedings of Machine Learning Research. PMLR, 2021*.

Fajcik, M., Jon, J., Docekal, M. and Smrz, P., 2020, December. [BUT-FIT at SemEval-2020 Task 5: Automatic Detection of Counterfactual Statements with Deep Pre-trained Language Representation Models](#). In *Proceedings of the Fourteenth Workshop on Semantic Evaluation* (pp. 437–444).

Jon, J., [Fajcik, M.](#), Docekal, M. and Smrz, P., 2020, December. [BUT-FIT at SemEval-2020 Task 4: Multilingual Commonsense](#). In *Proceedings of the Fourteenth Workshop on Semantic Evaluation* (pp. 374–390).

Docekal, M., [Fajcik, M.](#), Jon, J. and Smrz, P., 2020, December. [JokeMeter at SemEval-2020 Task 7: Convolutional Humor](#). In *Proceedings of the Fourteenth Workshop on Semantic Evaluation* (pp. 843–851).

[Fajcik, M.](#), Smrz, P. and Burget, L., 2019, June. [BUT-FIT at SemEval-2019 Task 7: Determining the Rumour Stance with Pre-Trained Deep Bidirectional Transformers](#). In *Proceedings of the 13th International Workshop on Semantic Evaluation* (pp. 1097–1104).

[Fajcik, M.](#), Smrz, P. and Zachariasova, M., 2017, December. [Automation of Processor Verification Using Recurrent Neural Networks](#). In *2017 18th International Workshop on Microprocessor and SOC Test and Verification (MTV)* (pp. 15–20). IEEE.

Projects

H2020 Criteria –

Comprehensive data-driven Risk and Threat Assessment Methods for the Early and Reliable Identification, Validation and Analysis of migration-related risks

Nov 2021 - Dec 2022

Working on the novel interpretable & efficient fact-checking system.
Project webpage is [here](#).

ROI Hunter –

Automatic Extraction of Attributes from Product Feeds

Since Aug 2018

Automatic product classification and detection of attributes from the product description. These are used to enhance product advertisements.

Awards & Achievements

Causal triplet extraction at CASE@EMNLP 2022 – 2nd place ²⁰²²

EfficientQA competition at NeurIPS2020 (track <6GiB) –

3rd place ²⁰²⁰

Counterfactual Reasoning at SemEval-2020 (task B) – 1st place ²⁰²⁰

Counterfactual Reasoning at SemEval-2020 (task A) – 2nd place ²⁰²⁰

RumourEval at SemEval-2019 – 2nd place ²⁰¹⁹

Deans Award for B.Sc. thesis ²⁰¹⁵

Theses Supervision

Michal Slávka (M.Sc., 2021) [Multilingual Open-Domain Question Answering](#)

Pavel Kocurek (B.Sc., 2021) [Visual Question Answering](#)

Ksenia Bolshakova (B.Sc., 2020) [Stylized Natural Language Generation in Dialogue Systems](#)

Jozef Karabelly (B.Sc., 2020) [Non-Supervised Sentiment Analysis](#)

Alžbeta Štajerová (B.Sc., 2019) [Automated Detection of Hate Speech and Offensive Language](#)

Tomáš Daniš (B.Sc., 2019) [Machine Comprehension Using Commonsense Knowledge](#)

Jan Kočí (B.Sc., 2019) [Recommender System for Web Articles](#)

3 out of 7 students obtained A evaluation and Dean's prize

Teaching

M.Sc. Courses

[Natural Language Processing](#) (ZPJ) (2019, 2021)

[Artificial Intelligence and Machine Learning](#) (SUI) (2019 –)

B.Sc. Courses

[Practical Aspects of Software Design](#) (IVS) (2017 – 2021)

[Scripting Languages](#) (ISJ) (2017 –)

NLP lectures at Summer Schools BISSIT19 (2019), [BISSIT21](#) (2021)

Skills

Communication & Organization

During the summers at the university (2013–2014), I worked at the Museum of Coins and Medals in my hometown, Kremnica, Slovak Republic. I have guided lots of local and foreign tourist groups and helped with the organization of special events at the museum.

Hobbies

Music – Drums and harmonica

Sports – Hiking, Running, Skating, Cycling, Volleyball, ...