



Martin Fajčík

NLP Researcher

Martin Fajčík

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

Google Scholar

<https://scholar.google.com/citations?user=KUU5fUUAAAJ&hl=en&oi=sra>

GitHub

<https://github.com/MFajcik>

LinkedIn

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

Education

Brno University of Technology / Ph.D. Candidate

Since 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

Industry Experience

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., 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., Kesiraju, S. and Smrz, P., 2020. [**Rethinking the objectives of extractive question answering**](#). *arXiv preprint arXiv:2008.12804*.

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

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

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 Karabellý (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 \(ZPJa\) \(2019\)](#)

[Artificial Intelligence and Machine Learning \(SUI\) \(2019 – 2020\)](#)

B.Sc. Courses

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

[Scripting Languages \(ISJ\) \(2017 – 2021\)](#)

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

Skills

Communication & Organization

Before the pandemic, I used to organize reading groups on advanced machine learning/NLP papers at our university.

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 – I enjoy playing drums and harmonica.

Sports – Hiking is my thing.