

# Practical and effective industrial applications of large language models

*A sequence of lectures within the TKP framework at the Institute of Mathematics at ELTE*

*25 – 29 September, 2023*

## Lecturer



László Lukács worked as Staff Software Engineer at Google between 2007-2023, focusing on machine learning. He has been a technical lead on Large Language Model Infrastructure, Google Assistant, Gmail Smart Reply, and on Google Maps. Previously he was a researcher at SZTAKI and has an MSc in Mathematics from ELTE Eötvös Loránd University.

## Venue

- 1117 Budapest, Pázmány Péter sétány 1/C
- Southern building, Room 3.218

## Program

- **Monday, 17:00–18:30: Using AI in Industry, Focusing on Natural Language Processing**

*Finding the right problem to solve and picking the appropriate tool to solve it. Setting up a productive collaboration between researchers, engineers and product owners.*

- **Tuesday 17:00 – 18:30: MLOps Principles**

*How to build, deploy, track, and maintain ML solutions in practice. Collecting meaningful and actionable information about data sets, model behavior and user interactions.*

- **Wednesday 17:00-18:30: Using Large Language Models**

*Tuning, chaining and distilling models to solve practical problems. How to get beyond prompt engineering and ways to make large models useful in products.*

- **Thursday 17:00-18:00: Privacy in AI**

*Using data and models in a responsible, fair, and compliant way. Techniques to train and use models in a privacy respecting way.*

- **Friday 10:00-11:30: Data and Model Quality Evaluation**

*Understanding model performance, finding gaps in quality and iteratively improving models and data sets. Open questions around truthfulness, deceptiveness and groundedness of model outputs, differing behavior of large models in training, testing and production environments.*