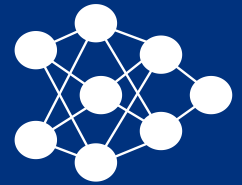


# PREDICTION AND VISUALIZATION OF PUBLIC TRANSPORT DELAYS

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## Purpose

- predict service delays for passenger planning
- ability to analyze predicted routes
- provide APIs that other projects can use for prediction



Try It Out!

## Neural Network

### Technologies

- PyTorch
- Scikit-learn

### Architecture

- SiLU Activation
- Batch Normalization
- Funnel Architecture
- Lazy Linear Input

### Data Format

- GTFS RealTime
- GTFS Schedule

### Input Object

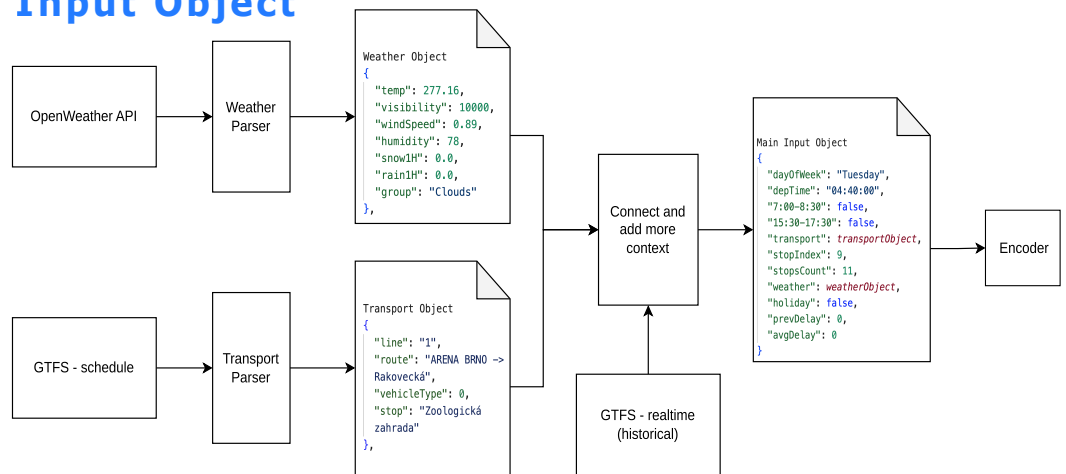


Figure 1. Architecture of the model for training

## Predictor Flow

- prediction is always performed for the entire route
- the section prediction serves as input for the next

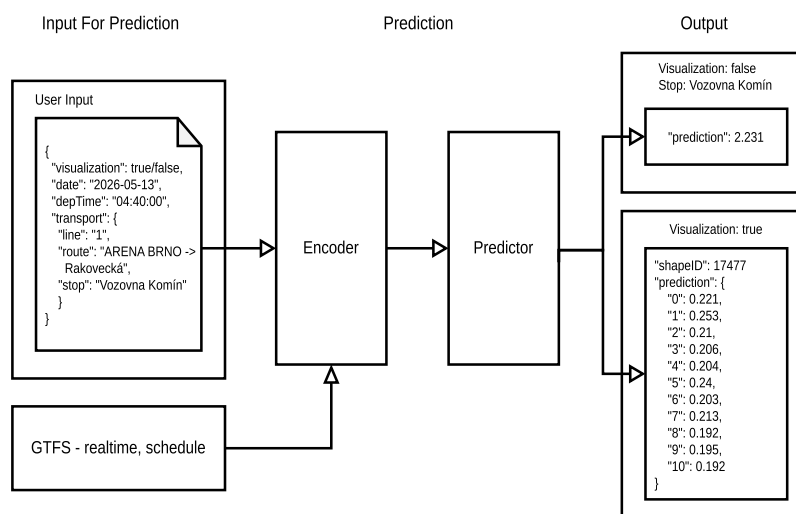


Figure 2. Diagram of the delay prediction process

- prediction of the entire route for visualization
- individual prediction for the selected stop

## Visualization Results

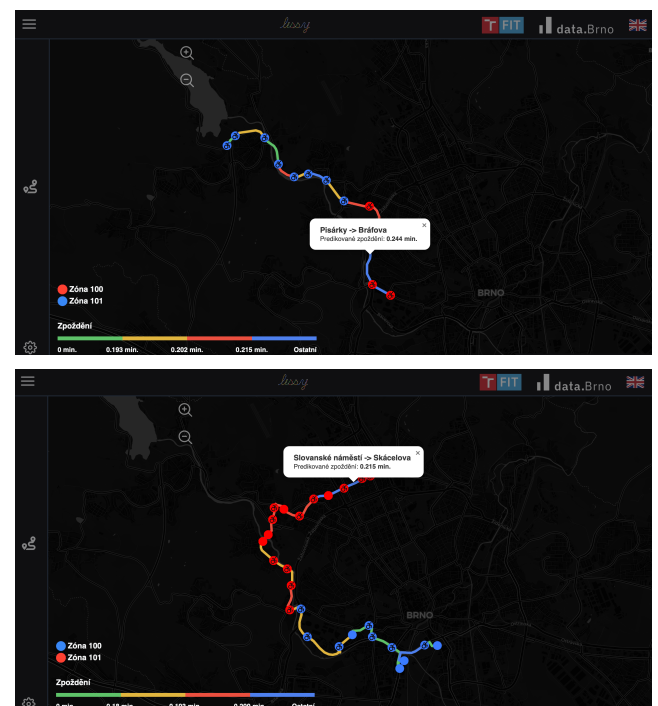


Figure 3. Preview of the predicted route