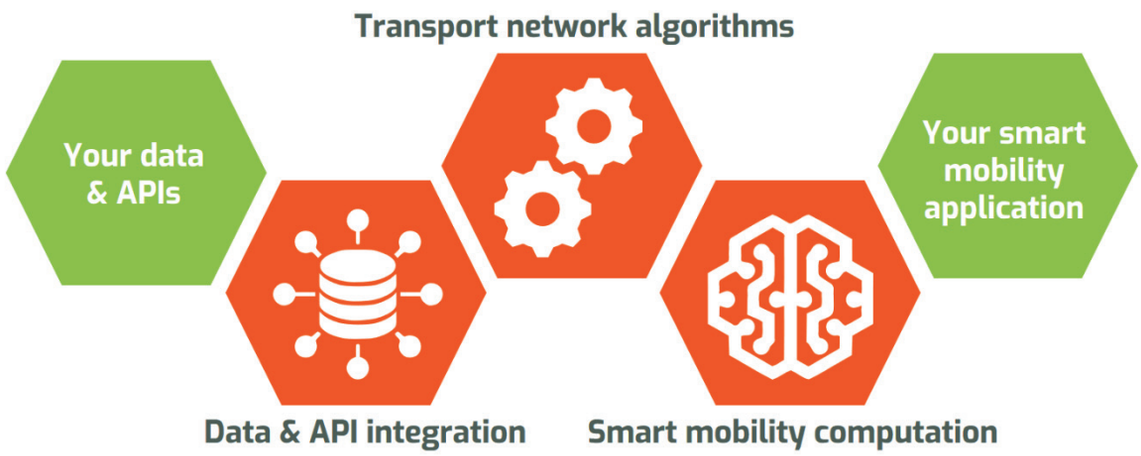
MOBILITY**BRAIN**

Software building blocks for smart mobility applications

- Build and run AI-powered mobility applications faster and cheaper
- Leverage powerful transport network computation algorithms
- Mix your data with bundled mobility datasets
- MaaS-ready: works with all means of transport and their combinations

Flexible Toolkit for AI-Powered Mobility

Combining mobility data & API integration, low-level transport network algorithms with high-level intelligent mobility services, MOBILITYBRAIN provides an unprecedented flexibility in implementing a wide-range of smart mobility applications and services.



Multi/Inter-modal

Supports all means of transport and mobility services – from free-roaming individual modes, through scheduled public transport up to shared and on-demand mobility services.

Bundled Data

Bundled with a wealth of mobility data, reducing the amount of data customers need to provide to build their applications. Road, cycling and pedestrian networks, and public transport timetables included.

Flexible Integration

Choose how you integrate MOBILITYBRAIN features into your application. Connect fully managed APIs or built directly into your application using an SDK. Source code licensing also available.

Mobility Data & API Integration Tools

Integrate heterogeneous data sources into a unified digital mobility model

Maps & POIs
PT timetables
PT real-time feeds
Bike/car sharing APIs
Accident & pollution data
Traffic APIs
Census & land use
Mobile phone data
GPS tracks
... and more

Extract → Transform → Load/Merge

Transport Network Algorithms

High-performance computation on intermodal transport networks

Multi-Modal Map Matching

Efficient algorithms for matching noisy GPS tracks to road, walk, cycling and public transport networks.

General Shortest Path

Multi-criteria and constrained shortest path algorithms for time-dependent intermodal transport graphs. One-to-one and one-to-many variants available.

Vehicle Routing

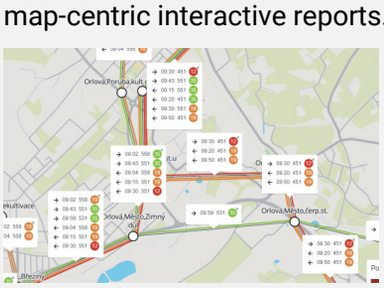
Flexible algorithms for solving allocating vehicles to passengers and goods in ridesharing and pickup and delivery problems.

Smart Mobility Computation

Deliver intelligent features driven by mobility data

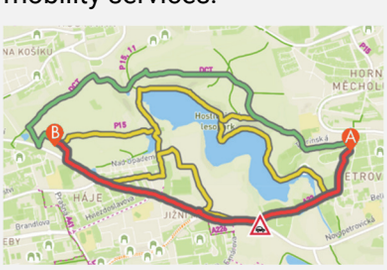
Data Analytics

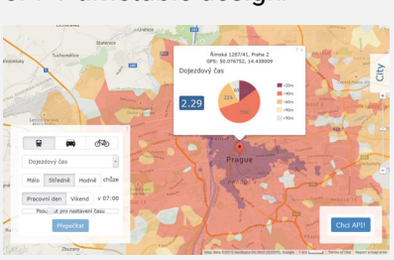
Highly-customizable spatio-temporal reports on inter-modal mobility data. Powerful aggregation operators and map-centric interactive reports.



Journey Planning

MaaS-ready, intermodal trip planning services considering real-time availability and cost of shared and on-demand mobility services.



Mobility Optimization

Flexible services for solving a variety of mobility optimization tasks, including vehicle rebalancing, station placement or PT timetable design.