

Tools & Solutions for Smart Tolling

July 2024

ambrosys



This is us!

15 years on the market

40 scientists & engineers from

€4M turnover
– growing for the 4th year in a row

12 nationalities
– physicists, software engineers, mathematicians, bioinformatics specialists, geoscientists

Located in the German capital region

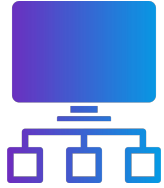
– one of Europe's premier technology regions



ambrosys

What we do*

DATA PLATFORMS & APPS



Data solutions

data lakes, data warehouses, data mesh

Dashboards

reporting tools, performance tracking, data visualization

Connectivity solutions

APIs of any kind, data protocols, end-to-end integration

AI-driven forecasting tools

Forecasts of demand, production, load, price and many more

Predictive maintenance

ML-based scheduling by technical and financial parameters

Security solutions

Identity management, cloud security, secure APIs

VIRTUAL ENVIRONMENTS



Simulations

of any scenario, for no matter what amount of data

Digital twins

with real time data integration, monitoring, analytics and feedback loop

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Scenario generators

AI-powered

Virtual sensors

and other virtual data generators

Safety evaluators with

algorithmic or AI-based perturbation engines

HPC

seamless access to high-performance computing resources

ADVANCED AI INFRASTRUCTURE



ML pipelines

end-to-end, by DevOps standards



Collaborative environments

for seamless, convenient and secure workflows

AI solutions

from concept to productive app

Data science & engineering

DevOps training

specifically designed for ML engineers

Dedicated packaging and containerization

Automated API generation

Automated deployment

AUTOMATION & OPTIMIZATION



Advanced algorithms

Automated modeling

Automated task planning

Physical models

e.g. for multi-objective optimization, capacity planning and forecasting

COACHING & EMPOWERMENT



Agile coaching

DevOps training

Strategy workshops

for evaluation and design of data-based business models

*Missing something here? Ask us; chances are good we can do.

Who we work with



MOBILITY

Smart
vehicles

Smart
infrastructure



SIEMENS



ENERGY

Production



Distribution

enercity



4cast



EVERYTHING ELSE

Weather, agriculture, legal, ...



:BREUER

Legal-Pythia



ETH zürich

Lumics



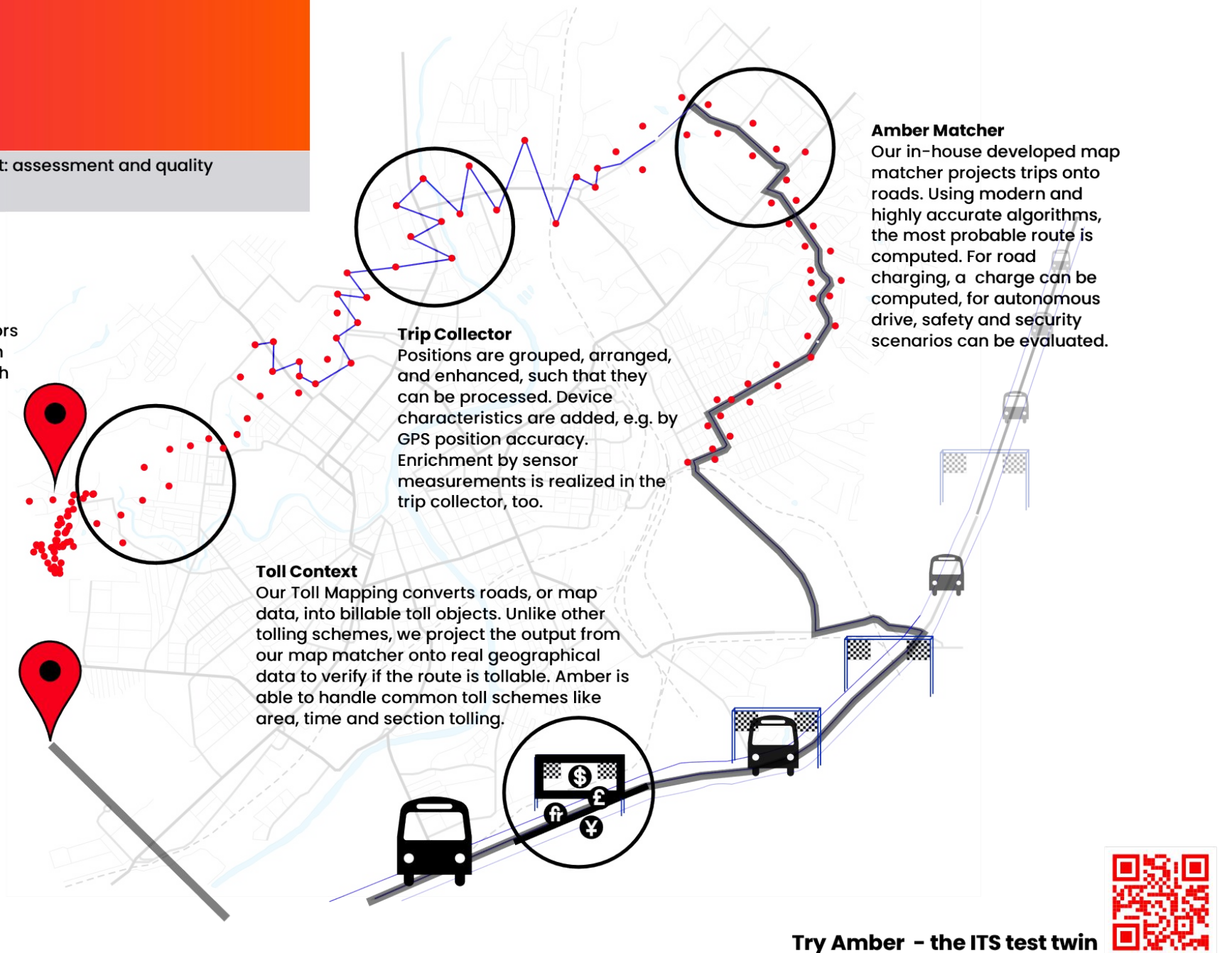
Amber is the new state-of-the-art tool for intelligent transport: assessment and quality management in one package.

Position Generator

We generate position data from traffic simulations based on the SUMO package. Uniquely, our position data is generated with characteristic localization errors common to on-board units. Using pattern recognition and data augmentation, typical driving behavior, such as turning, driving off a highway, or stop-and-go, are subject to the augmentation procedure.

Amber Report

Our report uses a quality score, summarizes and compares the corresponding results. It is designed to detect weakness and strength of your system. Our reference data is artificially generated, such that the reference is 100% known which guarantees **the best possible comparability**.



How collaboration typically works with Ambrosys: gradual commitment



1. Concept

Payment model

By the hour

Objective

Define the task & test whether we get along

2. Prototype/MVP

Payment model

Fixed price + bonus

Objective

Deliver a proof of concept & gain confidence

3. Lifecycle team

Payment model

Service or works contract

Objective

Develop, run and maintain your product

4. Cloned teams

Payment model

Service or works contract

Objective

Scale your product & speed development up

Let's talk!

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