

The logo for AI4SMB, with 'AI' in blue, '4' in red, and 'SMB' in blue.

# AI4SMB

## AI & Software With Smart Essence For SMBs (Small & Medium-sizes Businesses)

# AI4SMB



**AI4SMB** is a high-tech software development lab delivering **AI** applications and results to **Small & Medium-sizes Businesses (SMB)** and innovative enterprises worldwide.

# AI4SMB

With AI4SMB's technology and solutions, businesses of all sizes transform their data into an asset that allows them to consistently and timely answer their business questions at the scale and speed of their operations, providing them a leap ahead of their competition.

AI4SMB is more than just a technology company. It is a well-orchestrated composition of vision, technology, data science and business expertise. We have a unique recipe - not just the ingredients - to help you successfully build to an all-data driven business. There lays our strength.

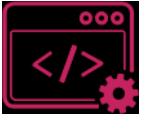
# Our Services

- Design and development of enterprise, cloud, web and mobile applications
- Consulting in software architecture, algorithms, applied AI and e-health
- Technical interim management and product management
- Joint venture partner for new innovations



# Our Competences

## SOFTWARE DEVELOPMENT



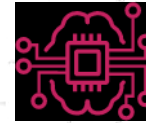
- Full-stack Software Development
- Backend Development
- Web Applications
- Mobile Apps
- System Integration
- Quick Prototyping
- UI/UX



## DIGITAL HEALTH

- Healthcare Interoperability
- EMR/EHR
- Patient Empowerment
- Digital Health Transformation
- Smart Medical Devices

## APPLIED AI



- Optimization and Process Automation
- Innovative User Interfaces
- AR & VR
- Recommendation Systems
- Machine Learning

## DEVELOPMENT CONSULTING



- Technical Interim Management
- Software Assessment
- Development Process Optimization
- Algorithm and Architecture Evaluation

# AI4SMB in MedTech & eHealth

## AI4SMB

This difference results from the following main areas of expertise:

- Digital healthcare + pharma, esp. interoperability standards (IHE), clinical data formats (CDA, HL7, FHIR, DICOM, Snomed CT), MDR regulations, telemedicine, precise medicine, patient empowerment, ...
- Applied Artificial Intelligence (AR/VR, avatars and new interactive media, NLP, machine, and deep learning, ...)
- Applied Computer Science (hi-availability, hi-performance distributed systems, sw architecture and engineering, scalability, refactoring, mobile apps, ...)
- Start-up expertise (from technical feasibility and advisory, through sw development, delivery, and operation, up to equity partnerships).



# AI4SMB in MedTech & eHealth: Competences

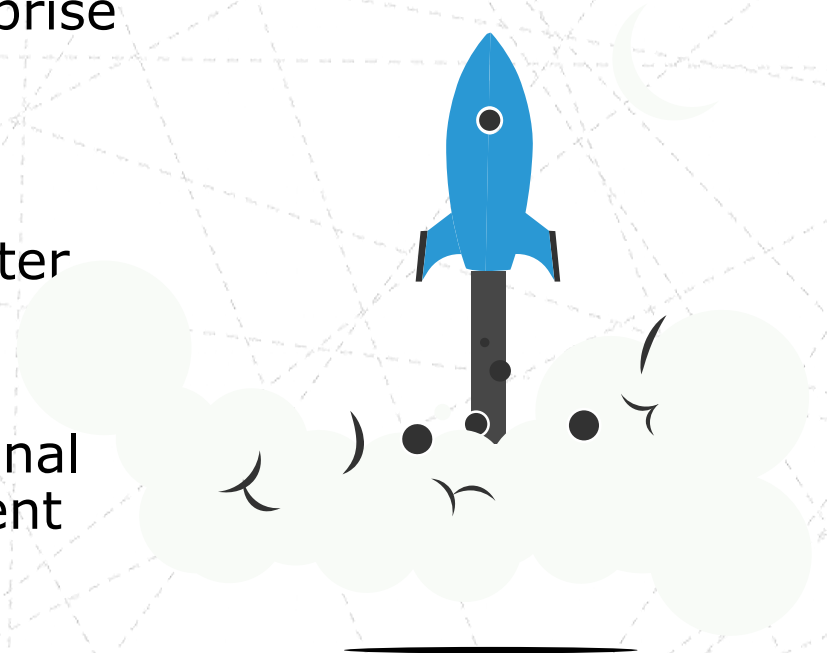
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# What Makes Us Different

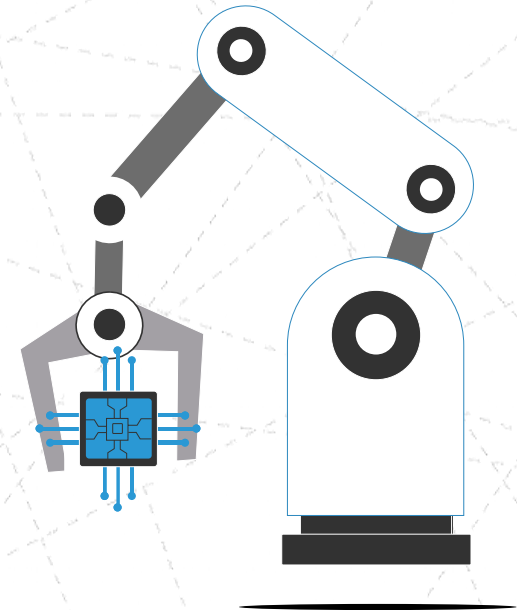
- Excellence in mission critical enterprise solutions
- Solid research background and expertise in applied AI and Computer Science
- Long-term experience in international projects and innovation development





# Industries & Markets

- Healthcare, transportation, education, manufacturing, retail, ... and others
- USA, Germany, Switzerland, UK and Czech Republic



# Our Values

- Problem solver mindset
- Innovative yet pragmatic approach
- Close cooperation with major AI research institutes
- Agile, efficient and reliable delivery
- Long-term high-tech IT partner and advisor





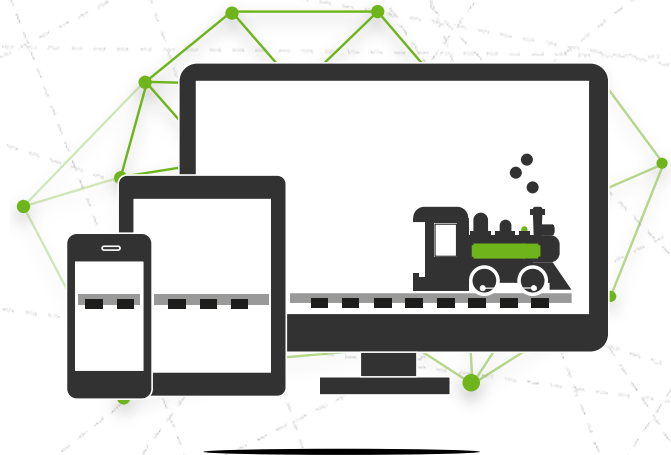
# Leading Health Information Exchange Platform

- Award Winning Health Information Exchange connecting hundreds of hospitals world-wide.
- It enables robust, high-performance and secure exchange of millions of patient records.
- 15 years of development partnership.



# Automated Railway Documentation Generation

- Problem: dozens of engineers created manually Track Charts drawings in a CAD software every day.
- Using modern AI-based lay outing algorithms, our system provides up-to-date track charts for the whole railway network.



# Automated Railway Documentation Generation

## CASE STUDY

### 1. Automated Railway Documentation Generation

#### Major Railway Company, USA

**CHALLENGE:** Track chart drawings of the US railway network had to be drawn manually in CAD software. Such task is labor-intensive and error prone.

**SOLUTION:** Our system integrates data from various relation and GIS data sources, employs smart data post-processing and leverages AI-based algorithms for a fully automated generation of the track chart drawings.

**RESULT:** Up-to-date track chart documentation of the whole US railway network is available in real-time while significantly saving manual labor of railway engineers and reducing number of errors.

#AI #bigData #interoperability #automation #expertSystem





# Train Driving Assistant for Energy Optimization (in Railways)

CASE STUDY

## 2. Train Driving Assistant for Energy Optimization

**Railway Companies and Manufacturers, Germany and France**

**CHALLENGE:** Provide train driver and train energy management system with optimal set of actions leading to minimal energy consumption while driving safely and on-time.

**SOLUTION:** We designed a unique algorithm that combines data such as track properties, train physical characteristics and timetable, in order to predict an energy-optimal driving course. Derived suggestions are provided to the driver and the train energy management.

**RESULT:** The system is used by several railway companies across Europe with savings up to 8% of the fuel costs.

#intelligentAssistant #mobile #AI #optimization



# Food-delivery Platform Automation

CASE STUDY

## 3. Food-delivery Platform Automation

### Food Delivery Startup, UK

**CHALLENGE:** Optimize ordering and delivery system for online food delivery service.

**SOLUTION:** We redesigned and reimplemented an ecosystem handling food orders, offerings of restaurants, delivery fleet management, route planning and mobile application for drivers.

**RESULT:** Our tailored solution significantly automated the delivery process, increased the delivery efficiency and reliability, improved customer experience and enabled the startup to reflect their dynamic growth.

#UI/UX #enterpriseJava #AWS #optimization #mobile



# Agent-less Application Performance Monitoring

- AI-based performance monitoring of applications without need of installing local agents on target machines.
- The product was successfully deployed to first customers and later acquired by a major APM company.



# System for Managing Health Insurance Policies

- Enterprise application which significantly simplifies batch changes of health insurance policies.
- Using an efficient UI and smart database techniques, a small team of administrators can execute safe updates of hundred thousands of insurance policies within few hours.



# Next-gen Swiss Hospital Information System

- We reinforced development team of the leading Swiss Hospital Information System vendor with clear target: get the new generation of the platform to the market.
- We implemented several modules, integrated the next-gen platform and provided interim management of the international development team.





# Our Involvement in Start-ups



IMPACT 51

Swiss VC Investment Group  
Partner & Mentors



**startup**  
advisory.

Startup Incubator  
London Mentors



AI Startup Incubator Prague  
Mentor, Expert, Advisor



# Dialog

## AI4SMB

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