

# Expertise-Driven. Business-Focused IT-Solutions

















































### About us

- Full cycle development
- Own IT products
- High Tech Park Resident

270+
IT specialists

25+

Years of experience in fintech

130+

Certificates in IT

90%

Of our staff are Senior level or higher

### Service line

### Mobile Development

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- Native
- Cross-Platform
- UI/UX design
- Testing and QA
- Team augmentation

# Business Process



- Online SME Business loans
- Online invoice financing
- Online-factoring

Management

- Online guarantees
- Decision making process automation

### **Web Development**



- Web Applications
- PWA development
- UI/UX design
- QA for web projects
- Team augmentation

### **Software Development**



- Product software
- Enterprise applications
- Team augmentation

### **Data Management**



- Data storage organization
- EDW architecture and implementation
- Migration to open-source solutions
- BI-system implementation

### **Open API**

API

- Architecture and implementation
- Consent management
- Strong Customer authentication implementation
- API on WSO2 Platform

### Service line

### **IT-services** Monitoring

- **Network monitoring**
- Server monitoring
- Cloud monitoring
- Application monitoring
- Service monitoring



### **IT-services** Management



- Incident and Problem management
- Service request management
- Configuration management
- IT-infrastructure discovery
- IT assets and reporting management





- Information security audit
- Penetration testing
- Monitoring and response
- Information security management systems development

### **Al Solutions**



- Data mining
- Machine learning
- Deep learning
- Computer vision
- Advanced data analytics



### IT-consulting





- Design and development of information systems
- Business process reengineering
- Development of technical requirements for software
- Development of process knowledge bases

# Technology stack

#### **Back-end**











C# **NET Core** 

Java

Python

#### **Databases**















PostgreSQL

Oracle

MySQL

**SQL** Server

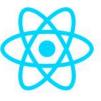
DB2

MongoDB

Redis

#### Front-end







JavaScript

React

Angular

### **Platforms**













OpenText

Grafana

ZABBIX

Finastra

**IBM** 

OpenTelemetry

iTOP

### Mobile technologies













Kotlin

ELMA

**ELMA** 

Zabbix

Pega

PEGA





ELK

GLPI

Swift

Objective-C

RxJava

### Al and ML Powered Solutions

The innovative division of vebtech, focused on developing and implementing scalable AI solutions that effectively address business challenges and transform key business processes.

### **Computer vision**



- Image recognition and object detection
- Document scanning and recognition (OCR)
- Visual content classification
- Video tracking
- Anomaly and defects detection
- Biometric authorization
   Action Analysis: The study of the
- behavior and interactions of users and objects

# Natural language processing



Sentiment analysis



- Language translation
- Virtual assistants and chatbots

### **Speech recognition**



Voice-controlled systems (voice

- search, voice assistants, speaker identification)
- Speech-to-text conversions
- Voice sentiment analysis

#### **Data Science**



- Customer Data Management System (CDM)
- High-Accuracy Predictive Models
- Machine Learning-Based Credit
  Scoring

### **MLOps**



- Automation
- Monitoring
- Version Control
- Scalability

# Core capabilities of Computer Vision

### **OCR**



Extracts and interprets text from images, documents, and video frames, enabling automated reading of license plates, documents, and signage.

### Classification



Automatically assigns categories or labels to objects within images or video, such as identifying vehicle types, uniforms, or equipment.

### Detection



Locates and identifies specific objects or features in visual data, supporting real-time threat detection, identifies unusual patterns, surveillance, and monitoring.

### **Tracking**



Follows the movement of objects or individuals across multiple frames or cameras, essential for security, perimeter control, and crowd monitoring.

### **Re-Identification**



Matches and recognizes the same object or person across different cameras or timeframes, even if appearance changes, supporting advanced security and investigation workflows.

### **3D Models**



Generates three-dimensional representations from visual data, useful for spatial analysis, simulation, and planning.

### **Operation Scenarios:**

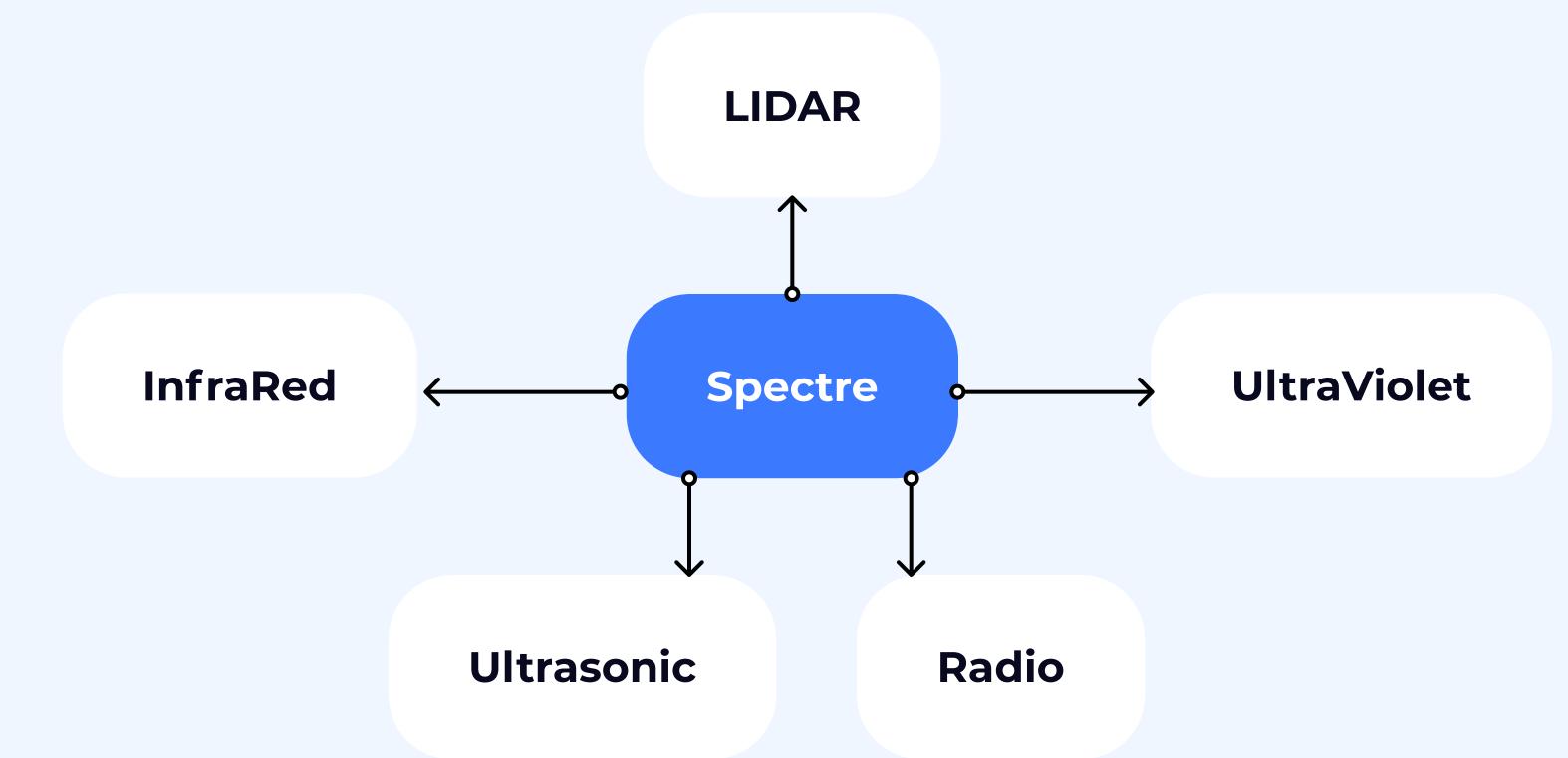
**Real-Time Processing** 

**Recording & Post-Processing** 

**GPU in Datacenter** 

**Embedded Solutions** 

# The variety of sensor technologies in CV



# Key Applications Areas of Computer Vision

### **Security & Surveillance**

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- Fake ID and fake face detection
- Person and anomaly detection in crowds
- Crowd size estimation, speed/behavior monitoring
- License plate recognition

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### **Automation & Safety**

- Autonomous bots (aerial, ground, water)
- Checking personal safety equipment (e.g., helmets)
- Technical damage classification and repair estimation

### **Aerial & Remote Monitoring**



- Vehicle and road issue detection
- Fire and electric line monitoring (incl. IR temperature)
- Wildlife observation and map validation

### **Advanced Analytics**



- Chaotic movement and unusual behavior detection
- Object re-identification ("same object at the same place")
- Automated picture and video description

## NLP + LLM: Key Capabilities and Applications

Chatbot Sentiment Analysis Text Summary Auto-translate

Lie Detection Smart Search in Local DB (RAG) Picture Description RAG

Keyword Detection by Meaning On-line Subtitles Helper in What-If Reasoning

Together, NLP and LLM technologies deliver smarter communication, deeper insights, and advanced automation for defense, security, and enterprise needs.

# **Key Application Areas of NLP**

### **Translation (with LLM)**

Automated translation between multiple languages

### Sentiment Analysis (emotions, lie detection)

Detection of emotions and potential deception in text for security and monitoring

### **Document Summarization (with LLM)**

Automatic generation of concise summaries for large documents

### **Document Consistency Check (with LLM)**

Verification of internal consistency within a single document

# **Cross-Document Consistency Check** (with LLM)

Analysis and comparison of multiple documents to identify contradictions

### **Keyword Detection by Semantic Meaning**

Identification of key concepts and topics based on meaning, not just exact word matches

### Local Database Smart Search (LLM-RAG)

Intelligent retrieval and synthesis of information from local databases using LLMs enhanced with RAG

# MLOps: Reliable Al Deployment & Management

MLOps (Machine Learning Operations) is a set of practices and tools that ensure your Al models are efficiently deployed, maintained, and improved in real-world environments.

### Automation

Speeds up model deployment and updates, reducing manual errors

### Monitoring

Continuously tracks model performance and system health

#### Version Control

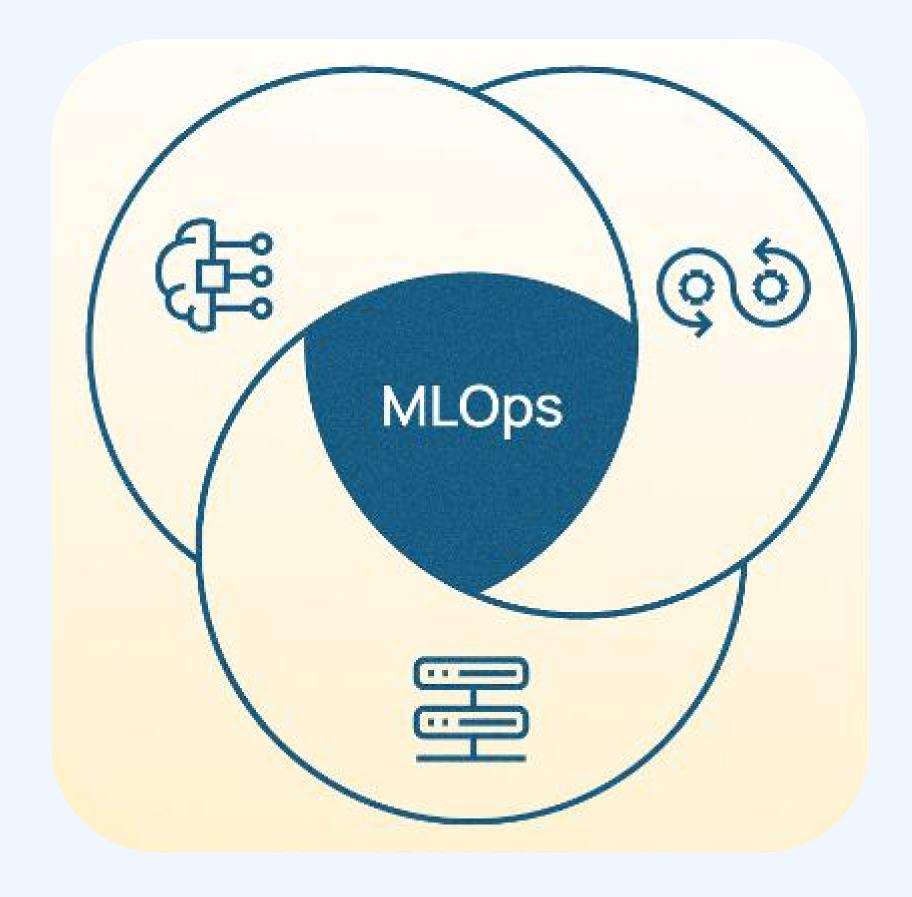
Keeps a history of model and data changes for transparency and easy rollback

### Scalability

Seamlessly moves solutions from pilot to full-scale production—on cloud, servers, or edge devices

### Security

Ensures data privacy, access control, and compliance with industry standards



# Data Management & Predictive Analytics

### **Data Management**

#### Collection

Gathering data from sensors, cameras, databases, and external sources

### Labeling

Organizing and tagging data for accurate AI training and analysis

### Synthetic Data

Creating artificial data to expand datasets, improve model accuracy, and protect sensitive information

### **Predictive Analytics**

### Forecasting

Using AI to predict equipment failures, security incidents, or operational needs before they happen

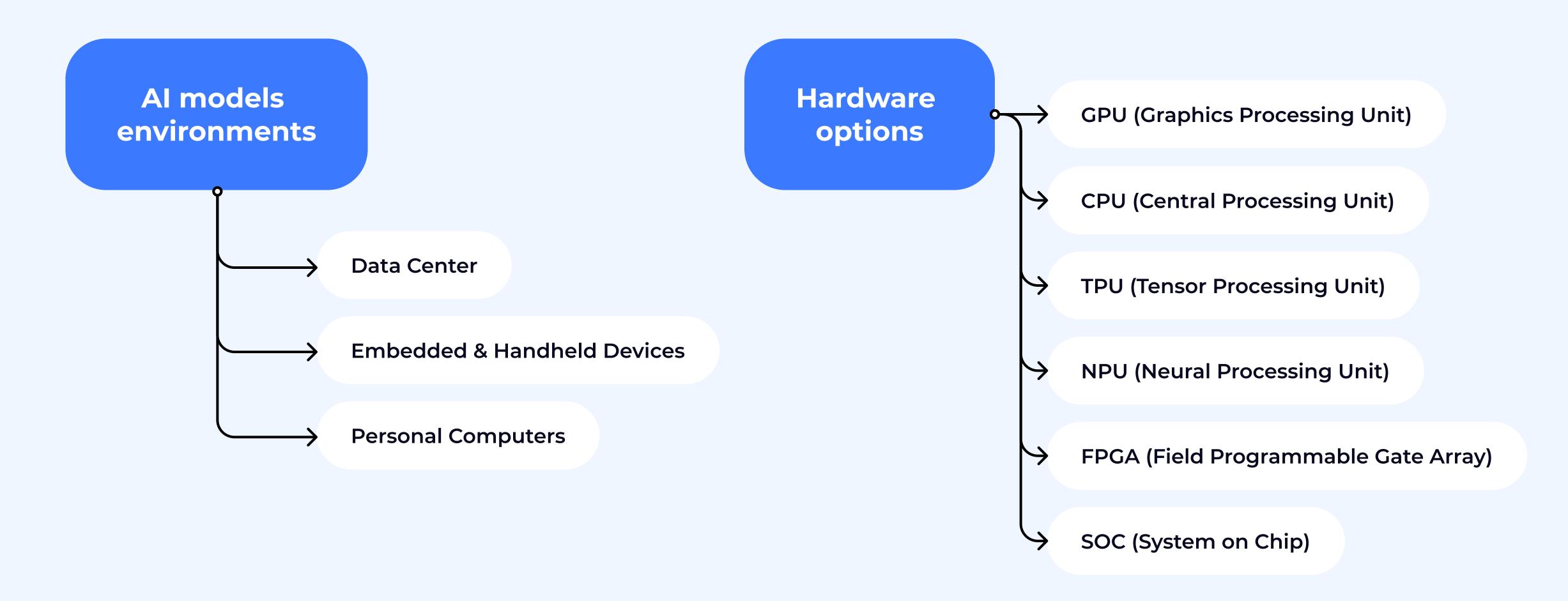
### Scenario Modeling

Simulating different situations to support planning and decision-making

### Resource Optimization

Analyzing trends to allocate resources efficiently and reduce costs

### How and Where Al Models Run





# Thank you for your attention!

### Ivan Mozzhukhin

Deputy General Director



