



ATELERIS

Comprehensive Software Engineering for Space

Software and Technology Development

COMPANY

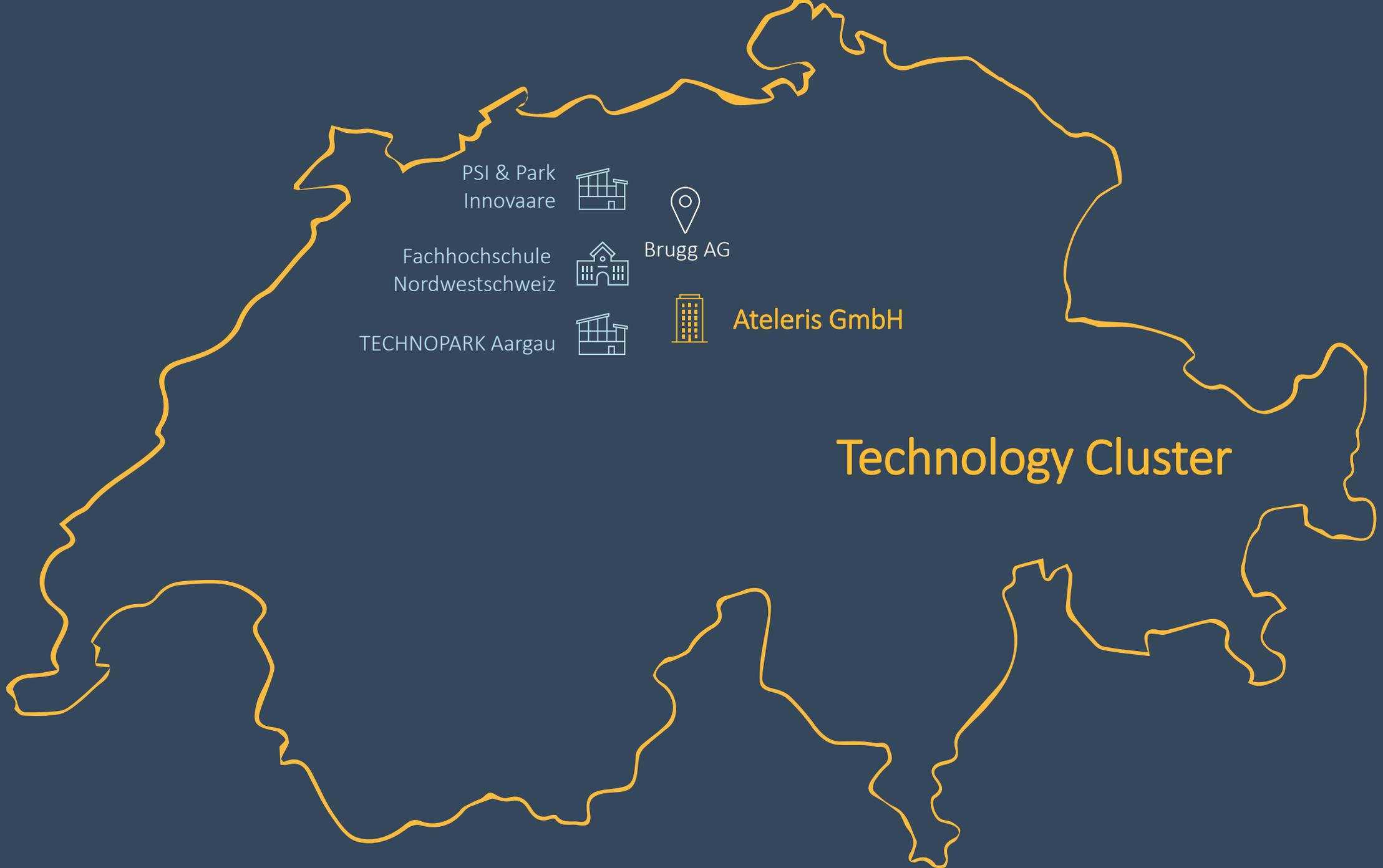


Comprehensive software and technology development on par with you

Software, algorithms, and digital technologies enable new products and services and are drivers of digital transformation in all companies. Together with our customers, our team develops customized digital solutions on par, straightforwardly, reliably, and fairly.

Ateleris GmbH was founded in 2016 as a spin-off of the University of Applied Sciences Northwestern Switzerland FHNW and is still closely connected to applied research and development. We are a technology service provider with many years of experience in realizing software and engineering projects for businesses, industry, and public institutions at home and abroad. We support our customers throughout the technology lifecycle, from needs assessment and feasibility evaluations to implementation and operation.

Our specialty is the transfer of technologies, methods, and know-how from computer science to other areas, which enables us to develop solutions for a wide range of customer needs: We build software for applications for space and research, intelligent IoT data applications for industrial customers or data science solutions for companies. We also support our customers in consulting mandates and with embedded development teams.



PSI & Park
Innovaare



Brugg AG

Fachhochschule
Nordwestschweiz



Ateleris GmbH

TECHNOPARK Aargau



Technology Cluster



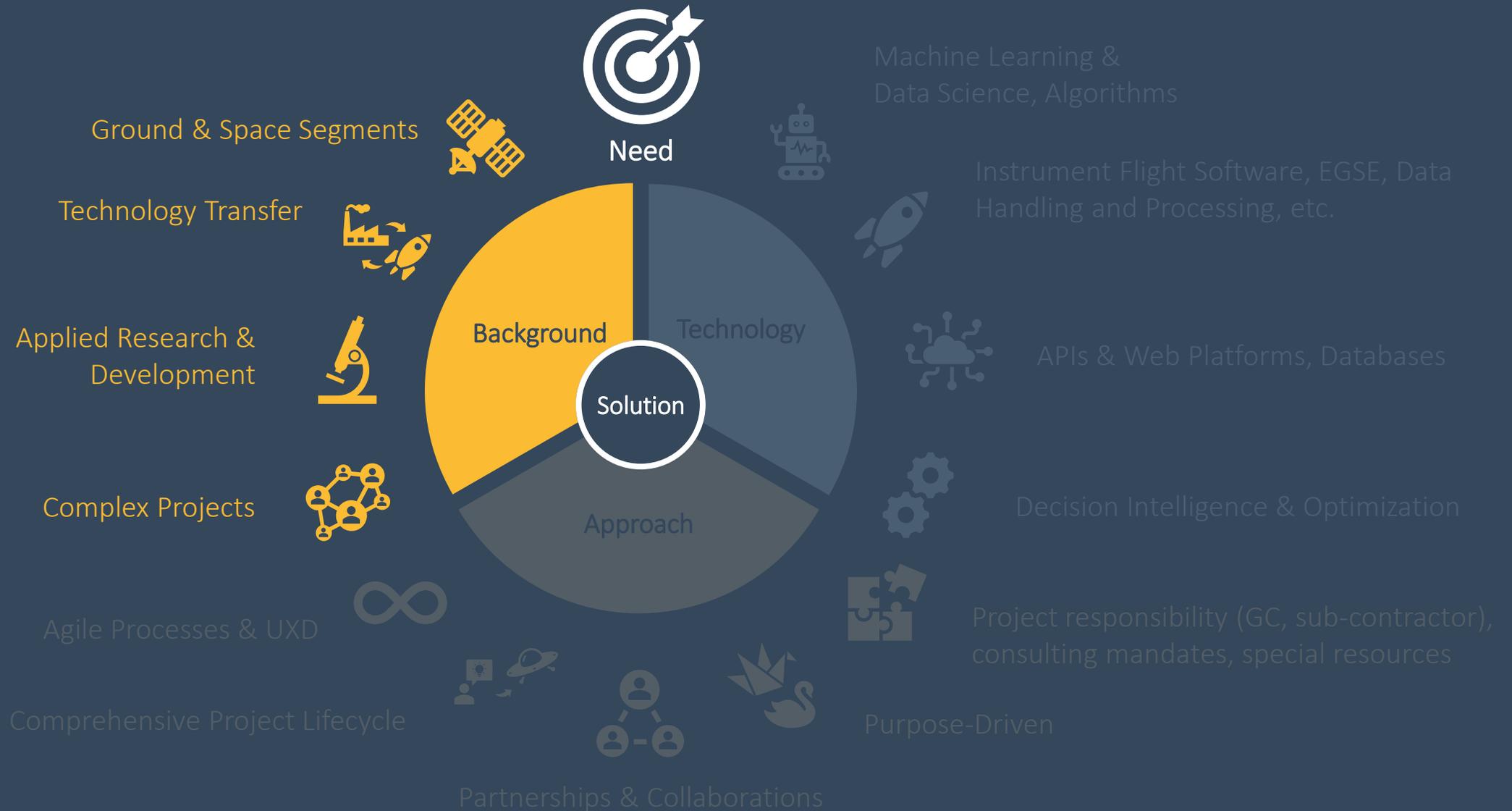


We work with the **best team** on the **most exciting projects**.

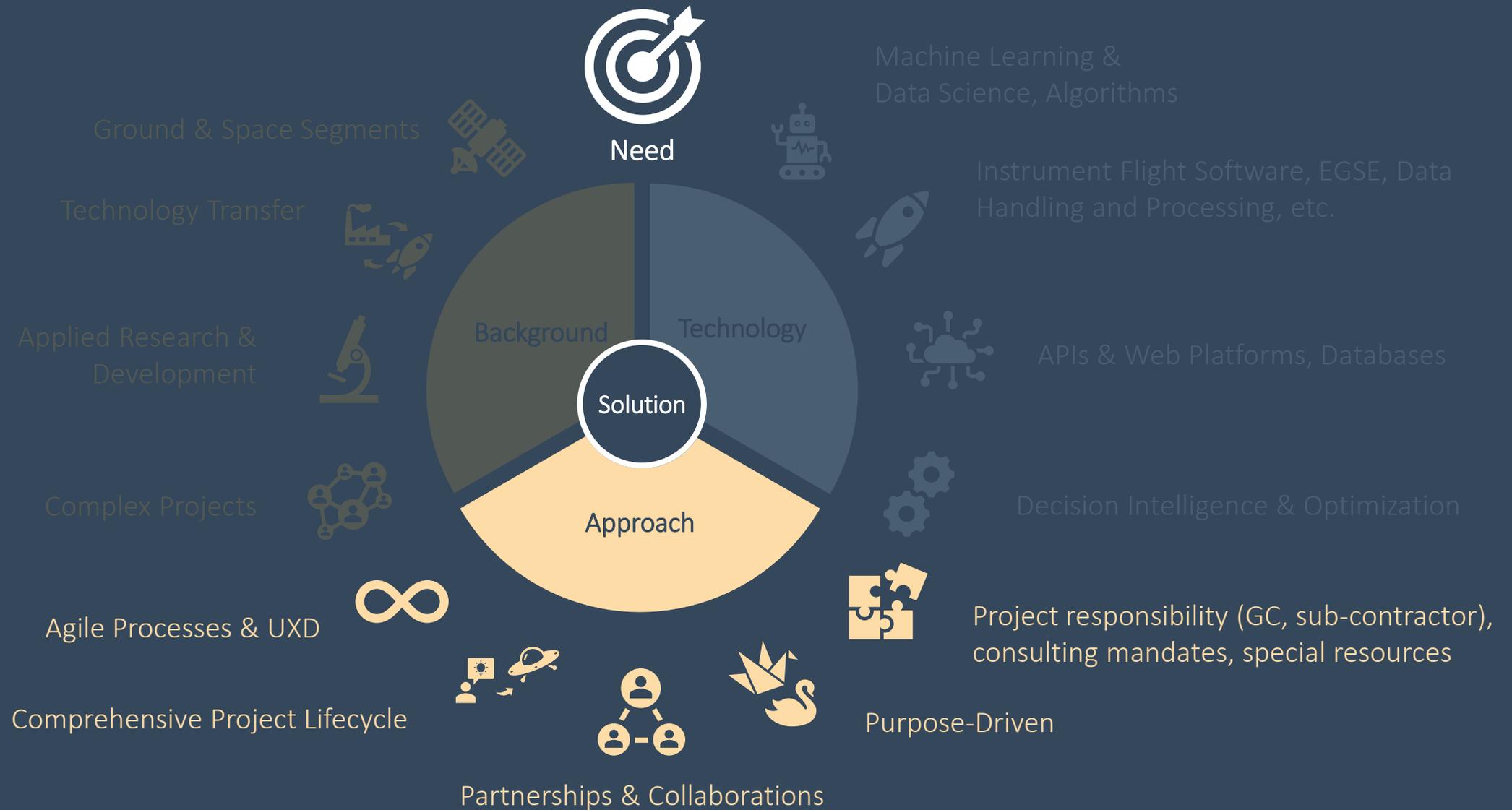
We work **purpose-driven**, **on par with our customers**, **reliable**, and **fair**.



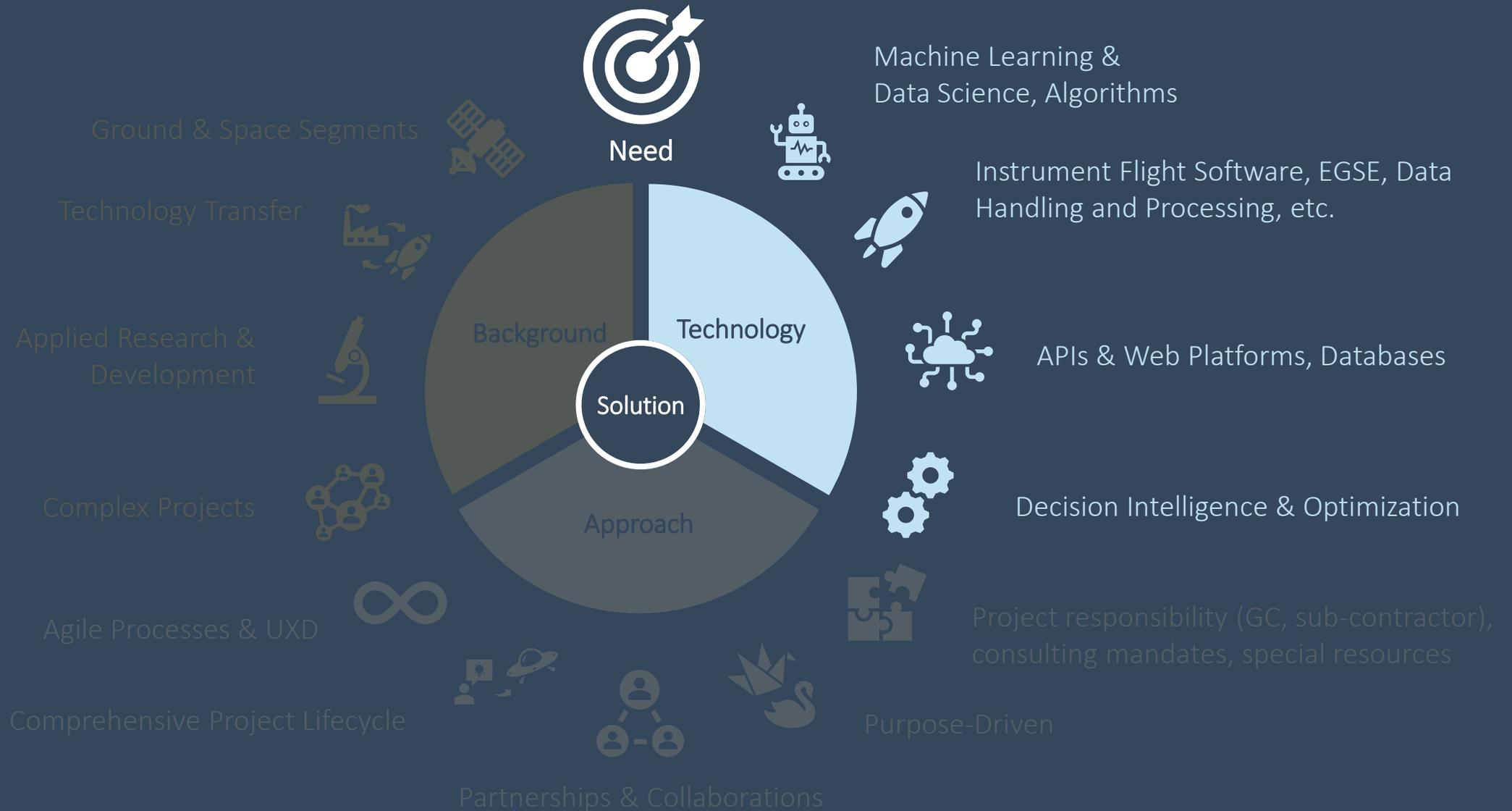
Comprehensive Software Engineering



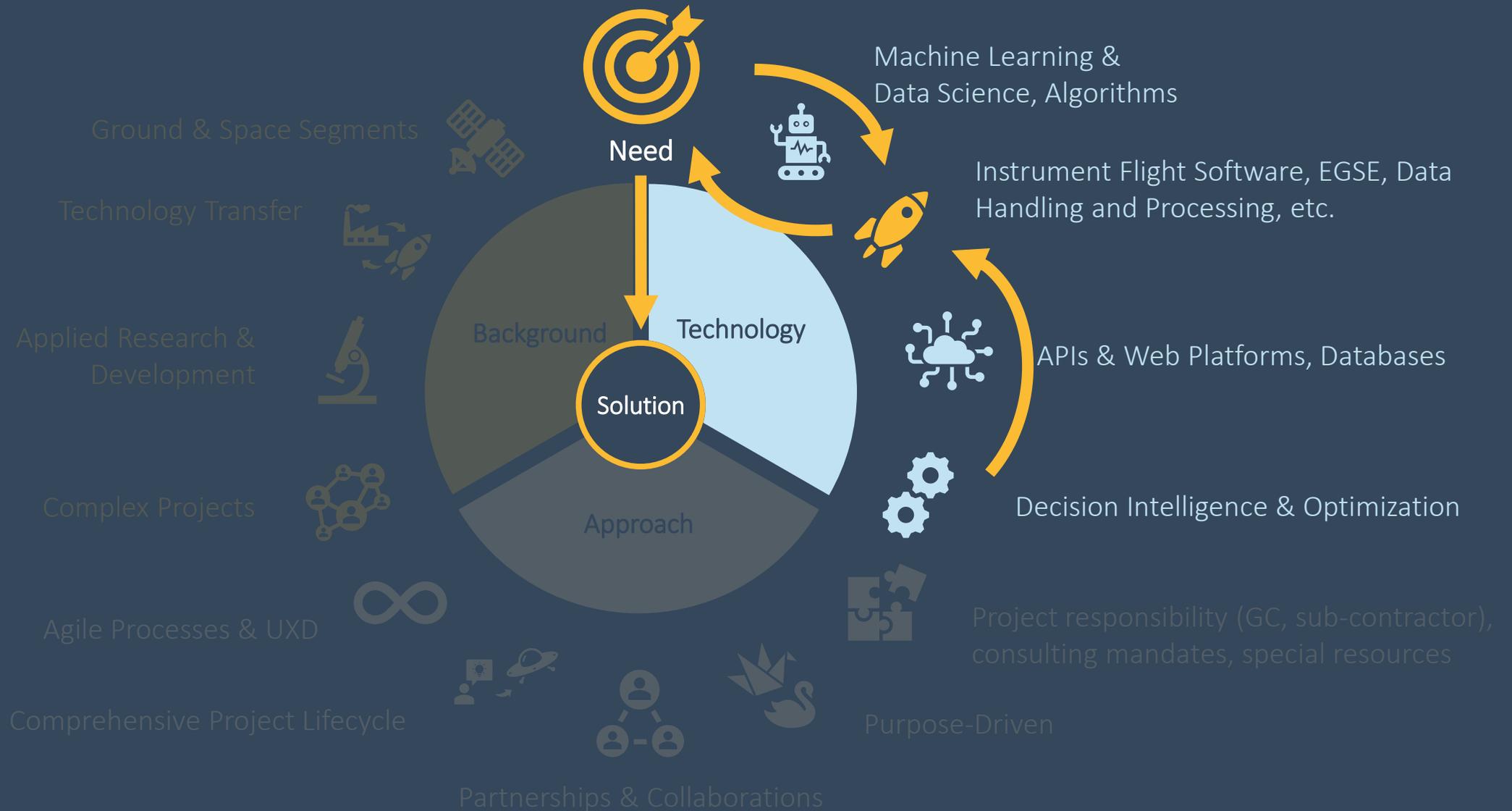
Comprehensive Software Engineering



Comprehensive Software Engineering



Comprehensive Software Engineering



Core Competencies



Engineering & System Design

- Requirements Engineering (functional & non-functional)
- Architecture Design (Software, Cloud, Data Processing)
- Hardware-Software Co-Design
- Interface & API Design
- UX & Interaction Design (including prototyping)



Web Platforms & Cloud

- Custom Web Applications & Dashboards
- Backend Systems, APIs, Microservices
- Secure, Scalable Data Platforms
- System Integration & Middleware
- Cloud-Native Deployment (Docker, Kubernetes, CI/CD)



Specialty Software

- Edge Computing (e.g., ML on drones, CubeSats)
- IoT Applications & Sensor Networks
- High-Performance Computing (HPC) Workflows
- Scientific & Research Software
- Space Systems (e.g., Instrument Software, Telemetry Pipelines)



Data & Intelligence

- Data Engineering & Data Modeling
- Machine Learning & AI Integration
- Decision Support Systems & Optimization
- Technology Consulting & Data Strategy
- Proof of Concepts (POC) for Data-Driven Solutions



Official GUROBI Partner
Switzerland



Collaboration & Delivery

- End-to-End Project Delivery (Prime or Sub-contractor)
- Embedded Teams for Co-Development
- R&D Consulting & Technology Transfer

Project Lifecycle – From Vision to Operation

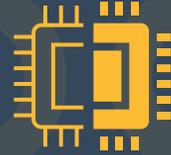
Vision Scoping



Shaping



Development



Realization



Operation & Continuous Improvement



- Understanding business challenges
- Stakeholder interviews & opportunity mapping
- Technology feasibility assessments

- Requirement & Design studies
- Mockups and early prototypes
- Feasibility POCs and user validation

- Lean agile project execution
- Software & hardware co-engineering
- Integration engineering
- Continuous integration, verification & optimization

- Platform setup & cloud orchestration
- Monitoring, updates & lifecycle management
- Ongoing user support & performance tuning
- Iterative feedback loops
- Feature expansion
- Technology transfer to client teams

Why Choose Us?

Diverse and Tight-Knit Team

Fresh perspectives meet seamless collaboration – short paths, open communication, and mutual support spark real innovation.

Cross-Industry Experience

From energy and industry to space and robotics – we bring deep, cross-sector know-how to tackle complex challenges.

Swiss Engineering with Integrity

We live engineering: honest, critical, pragmatic. We speak clearly and build solutions that deliver.



3..., 2..., 1..., GO

Lean processes and a flexible setup mean we can launch in days, not weeks – no overhead, just action.

Flexible & Scalable Solutions

Our teams grow with your project – whether it's fullstack or machine learning, the right people are ready to jump in.

Client-Focused & Purpose-Driven

We build what matters – for your users, business, and the real world. Aligned with your goals, we challenge assumptions to make every feature count

Our Software Products

Stenoris (<https://stenoris.com>)

Transcription software for Swiss German, German, English, French, etc., with an online editor.

Ragtime (<https://ragtime.ateleris.com>)

LLM and RAG-based bot for searching information in documents.

Ateleris Bazar

A software-as-a-Service platform for easy integration of AI services into applications, e.g., transcription models for speech-to-text conversion.



EXPERIENCE

Model-based Analysis of Ordering Costs and Price Structures

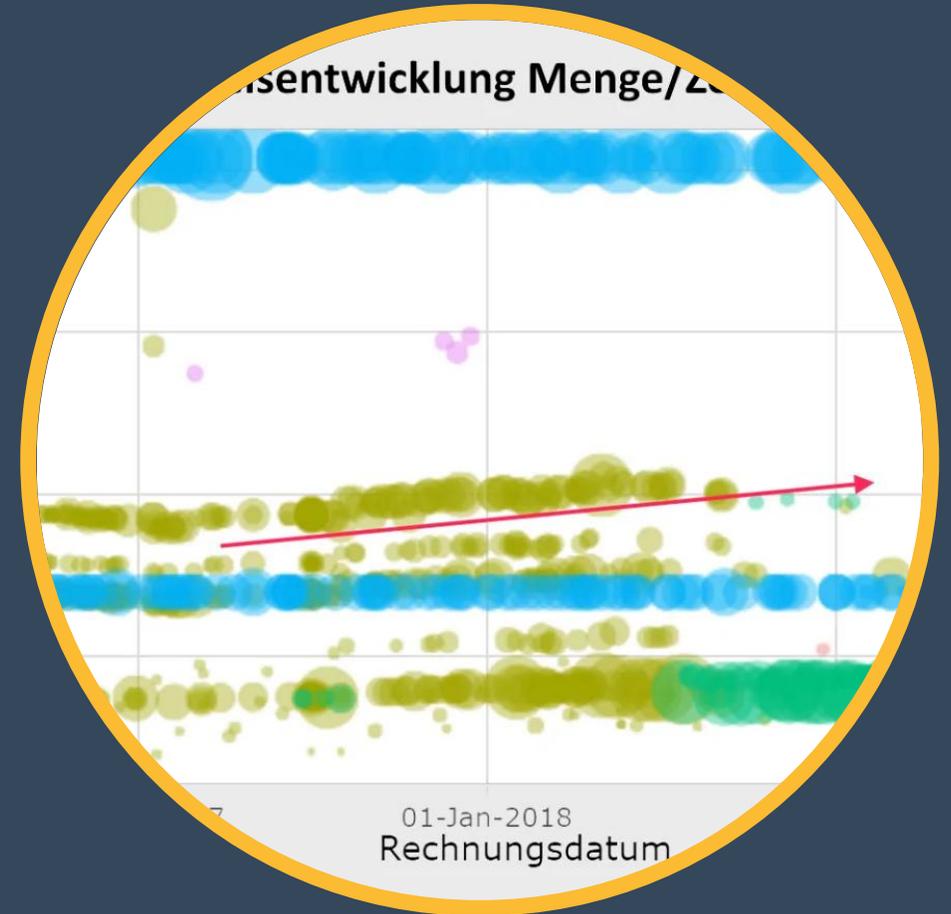
Data-driven Decision Making

Modeling of price and quantity structures through data science algorithms

Interactive visualization of procurement data using an analysis dashboard

Technologies

- Shiny/R and Plotly
- Regression analysis, data processing
- Digital procurement / business intelligence





Energy Monitoring for Minergie

Design, development and operation of the new energy monitoring platform for Minergie Switzerland.

Implementation of data analysis modules for computing key performance indicators and comparing projected and measured values.

Technologies

- Java and Spring Boot
- Angular
- PostgreSQL
- OAuth, REST API
- Docker, Kubernetes

Finding the Perfect Match

System searches for suitable candidates from over 500k possible people.

System recognizes dependencies between people in the pool and can derive matching suggestions.

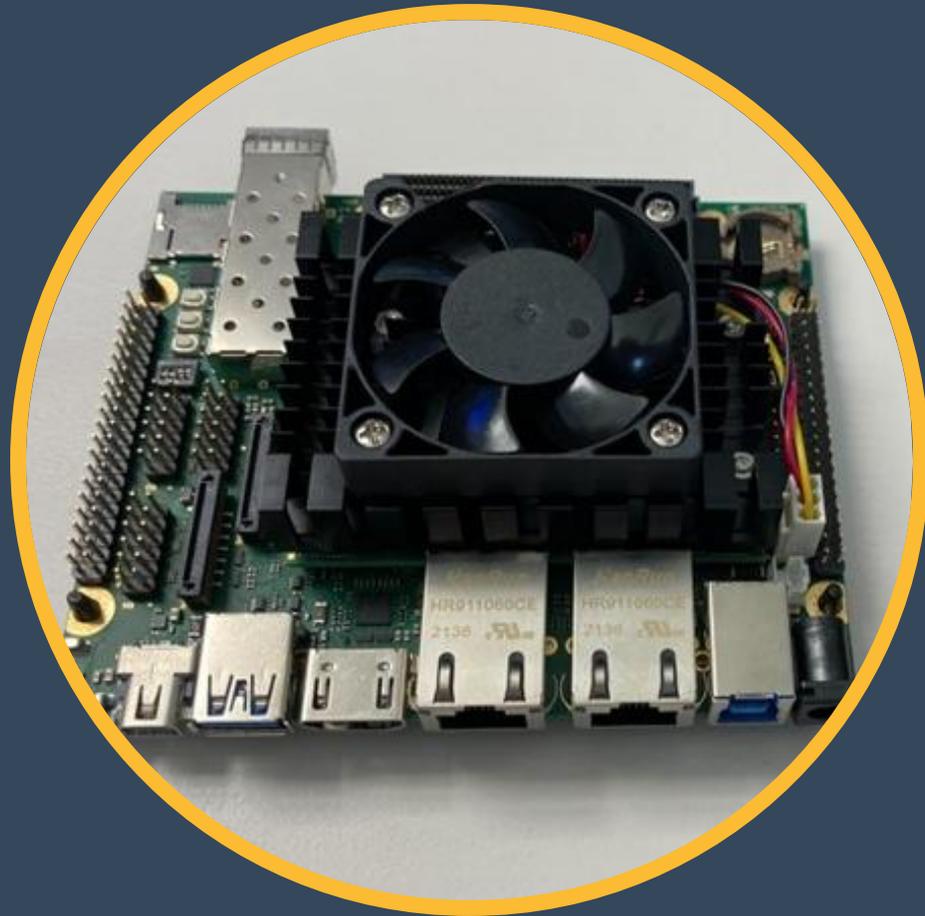
System can estimate and predict missing attributes.

Technologies

- .NET/C#
- ML.NET
- MongoDB
- Docker in AWS Elastic Beanstalk



Click [here](#) to learn more.



Embedded ML Image Processing

Development of a ML image processing pipeline in embedded hardware

ML object recognition and segmentation directly on drones or mini-satellites (CubeSats)

Training of models

Technologies

- PyTorch for model generation
- DagsHub for data version control
- Xilinx SoC FPGA with VitisAI for Embedded ML
- Object Detection
- Semantic Segmentation

STIX Data Processing and Archiving

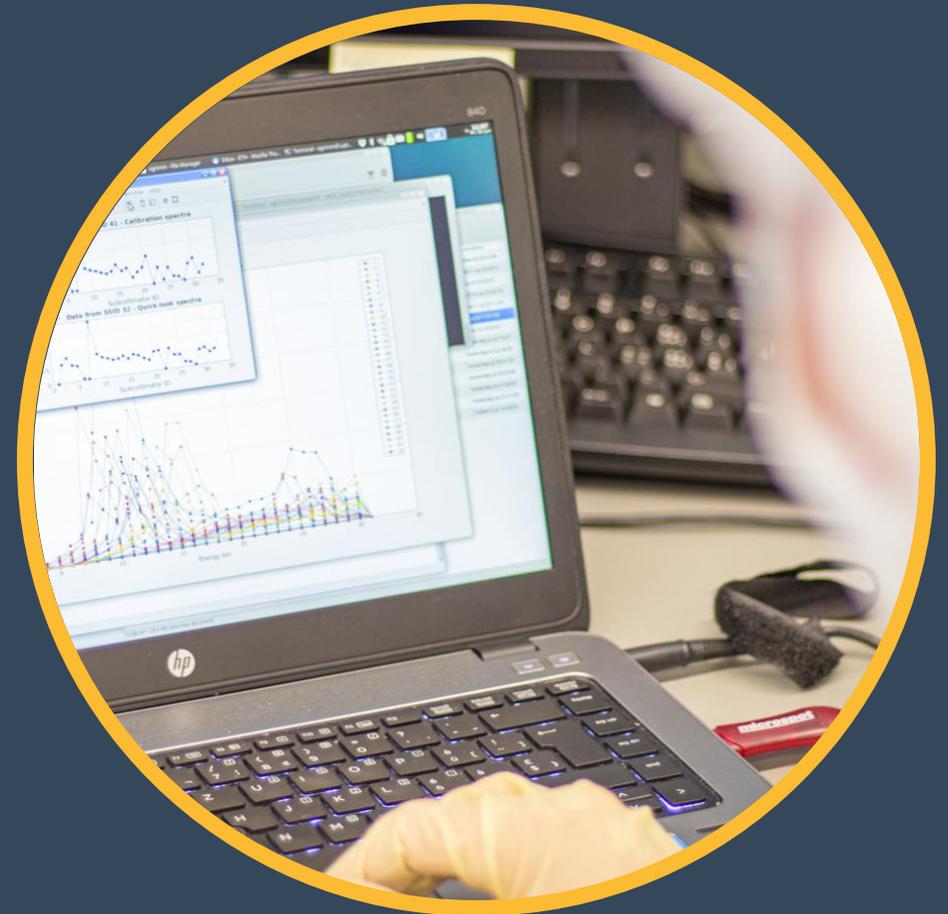
Development of ground-based data processing pipeline in Python.

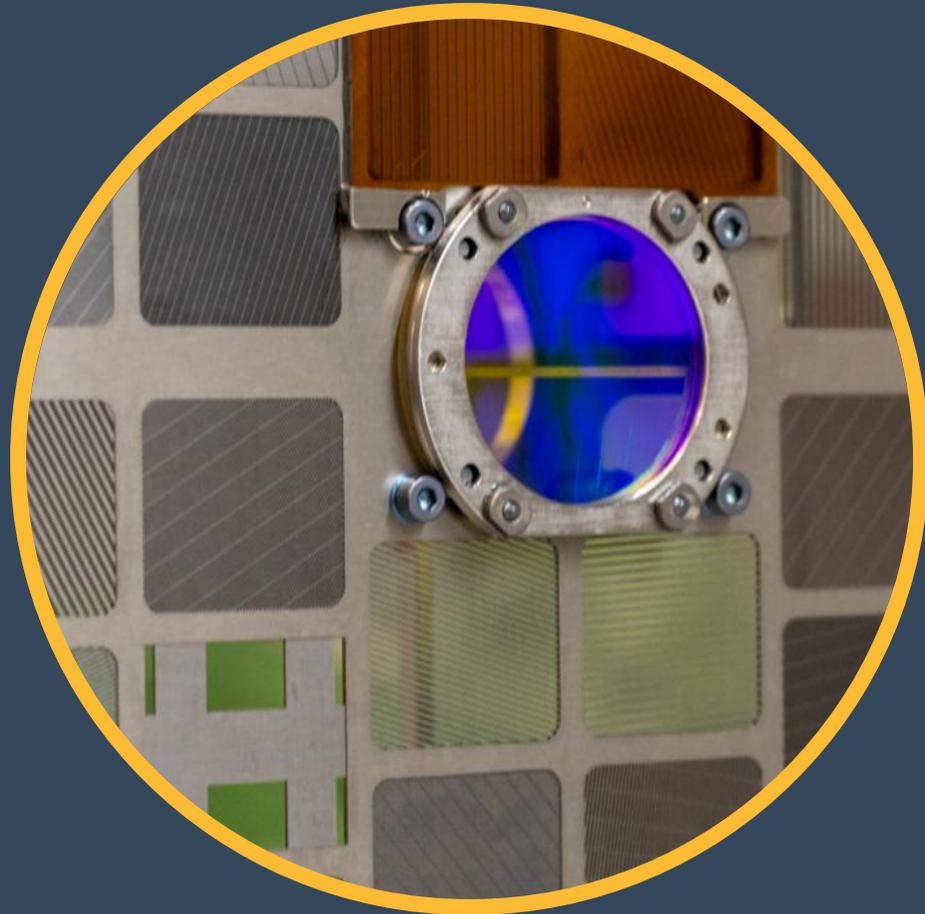
Transformation of telemetry data to housekeeping, quicklook, and science data.

Support to operations in flight.

Technologies

- Python
- Telemetry parsing
- Data analysis and image reconstruction





STIX Flight Software Development

Flight software development and maintenance for solar instrument STIX.

Software verification and testing with EGSE.

Optimization of onboard data processing.

Support to operations in flight.

Technologies

- Embedded C/C++
- Real-Time Executive for Multiprocessor Systems (RTEMS)

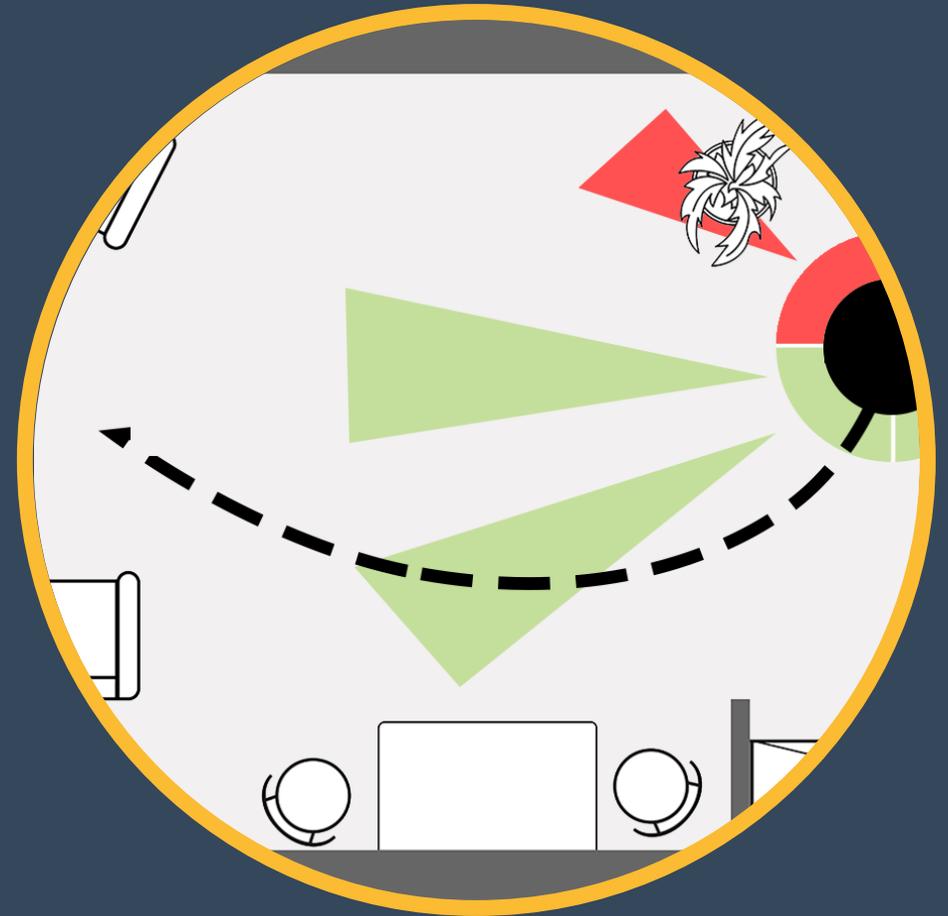
Navigation for a Robot

Development of «indoor» navigation algorithms for autonomous pathfinding of a care robot.

Automatic exploration and mapping of space, with detection of static and moving obstacles.

Technologies

- Development of algorithms
- Optimization, path finding, obstacle avoidance
- Mapping algorithm (sonar, LIDAR)
- Java development





Bang & Clean IoT-Plattform

Design, development and cloud operations of an IoT data acquisition solution for Bang & Clean AG's boiler cleaning devices.

Implementation of a web-based dashboard for visualization and analysis of process data.

Technologies

- ASP.NET 6.0 / C#
- React UI
- MQTT
- Kubernetes
- Azure Cloud

Automated Route Planning of Customer Deliveries

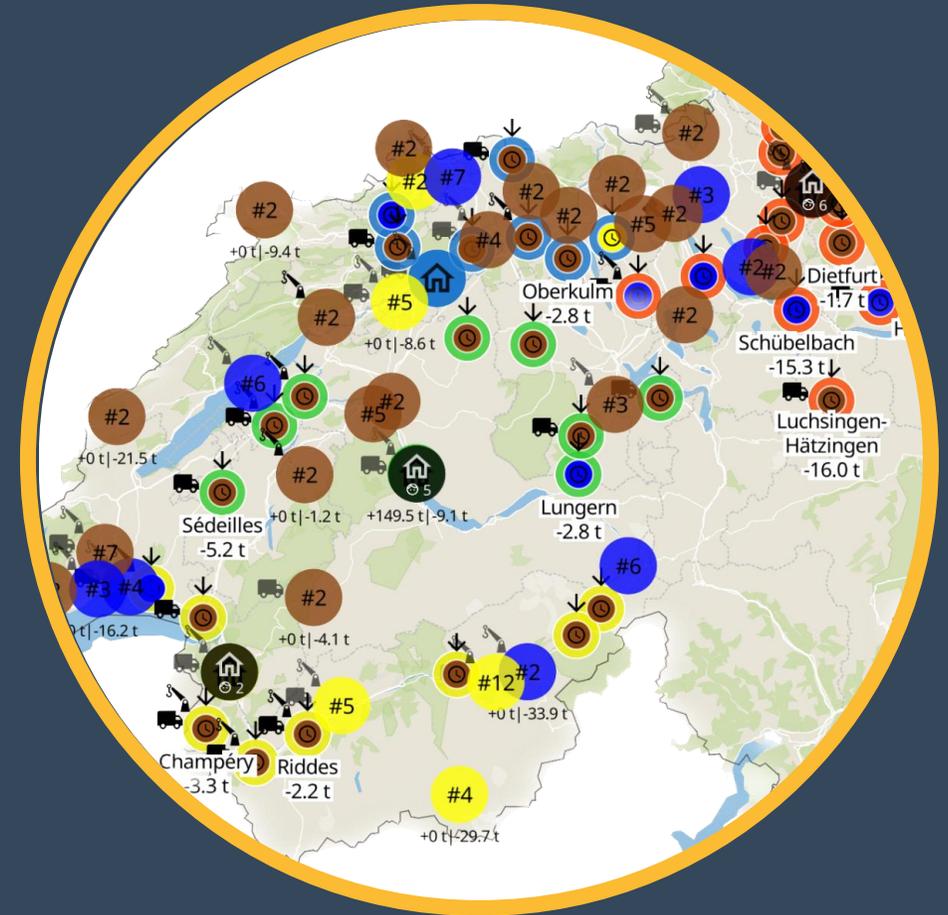
Cost and resource optimization

Support the dispatcher (e.g. by defining fixed routes due to extra time required for special deliveries)

Manages hundreds of deliveries with around 70 vehicles every day

Technologies

- Evolution-based optimization
- Mathematic modeling
- Java





Virtual-Reality-based City and Traffic Planning

VR simulation platform to experience and test city planning and traffic concepts

Extensive comparison of different variants before start of construction

Technologies

- Virtual Reality (VR)
- Unity & .NET
- Hardware and Sensor development

Life Cycle Assessment (LCA) of Space Transportation

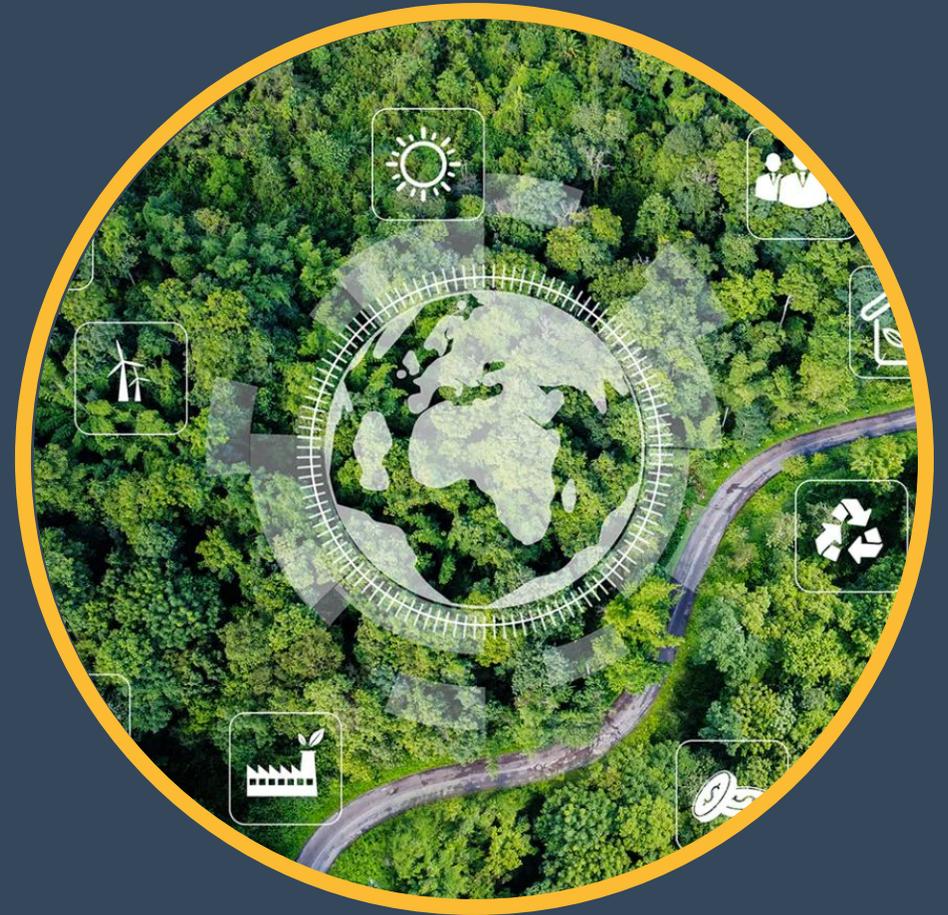
Assessment and comparison tool for Life Cycle Analysis (LCA) of space transportation

Acquisition and analysis of different transport configurations

Various indicators: global warming, energy usage, space debris etc.

Technologies

- Ecological Balancing
- OAuth2 / OIDC Authentication with Keycloak
- C#, .NET Core, Python, GraphQL
- React, TypeScript, SCSS, JSON, YAML





Other Projects Online

<https://www.ateleris.ch/experience>

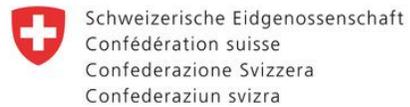
Partners and Clients



Fachhochschule Nordwestschweiz
Hochschule für Technik



European Space Agency



Eidgenössisches Departement für
Wirtschaft, Bildung und Forschung WBF
Staatssekretariat für Wirtschaft SECO



A person is silhouetted against a night sky filled with stars. The Milky Way galaxy is visible, stretching across the sky with a prominent purple and pinkish glow. The person is standing on a dark, silhouetted hill or rock formation in the foreground. The overall scene is dark and atmospheric, with the bright stars providing the primary light source.

CONTACT



Contact me on
LinkedIn



Ateleris GmbH

Neumarkt 1

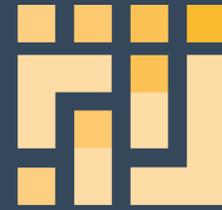
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