Software & Interfaces for Smart Machines

Adaept Engineering offers innovative software solutions that lead your machines and systems into the digital age. Our focus: seamless integration – secure and efficient.

About Us

Adaept Engineering was founded by three engineers who have been bringing their experience in IT security, industrial communication and data analysis to industry since 2016.
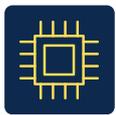
As an Umati partner and member of the OPC Foundation, we are committed to internationally recognized standards. Our involvement in the OPC standardization committees reflects our commitment to excellence.

Our Expertise

Industrial Communication

Customized OPC UA solutions with standard-compliant data models – including vendor-specific extensions for your USP

Embedded Systems

From microcontrollers to industrial PCs: We breathe life into your machines - with Linux, freeRTOS, Zephyr or on bare metal.

Distributed Systems

Seamless coordination of complex device fleets and swarms through intelligent machine-to-machine interfaces

Services

Industrial IoT: OPC UA

- Natively in embedded systems
- Docker container on Yocto Linux
- As retrofit on external hardware

Rapid Prototyping

- Development of your MVP
- From the concept phase to a functional prototype
- In 3 months at a fixed price

Industrial Research

- Distributed OPC UA applications in a containerized architecture
- OPC UA Safety
- Asset Administration Shell (AAS)
- Manufacturing-X

Workshops & Consulting

- Your challenge – our solution
- Knowledge transfer from the VDMA working groups
- Trainings & seminars

Contact

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Intelligent Solutions for Your Projects

Adaept Engineering supports your projects with proven and modern technologies: for retrofits or new developments - we coordinate stakeholders, develop and integrate for your project's success.

Recent Project References

IIOT RETROFIT INTRALOGISTICS

- **Status monitoring**, distributed **control** and **automation** in intralogistics
- Founding member of the VDMA working group "OPC UA for Cranes & Hoists"
- Retrofit for cranes to enable **dashboard** integration, **remote control** and **machine-to-machine (M2M)** coordination

SECURE IIOT INTRALOGISTICS

- Development of a **secure** IIoT software stack for machines using **hypervisor** technology
- Improvement of communication security through authentication/authorization via OPC UA
- Objective: **Simplified certification** of Industry 4.0 products

FOIL PRINTING RETROFIT

- **Reverse engineering** and analysis of critical PLC code paths
- Interconnection of systems for optimized workflows, **increased quality** and **efficiency**
- Implementation and extension of third-party code, including safety checks
- Coordination with suppliers for **seamless integration**