Experts for Model-Based Design, Control Systems and Industrial Communication



Green Energy



With over 25 years of experience, Sokratel serves as a strategic development partner, delivering innovative solutions within the automation industry. Our expert teams offer an extensive range of services including the design, development, and optimization of automation systems and the seamless integration of various components, from software development and testing to real-time control and monitoring. We assist our clients in planning, implementation, testing, prototyping, and offer individual support.



We use advanced technologies and methods to ensure maximum efficiency, reliability, and performance for all products and processes. We develop in classic low-level as well as established high-level programming languages, e.g. IEC-61131, C/ C++/ C#, Python, Java and Go.

Hardware-in-the-Loop PLC Applications

SCADA CI/CD Industrial Communication

Test Automation IIoT Platforms

FPGA TSN Real-Time RTOS

Controller and Plant Model Design

Model-Based Design

Sokratel is an **official MathWorks Partner** and our **Model-Based Design specialists** provide experienced support in MATLAB® Simulink® software development from the initial requirements to the finished software.

Simulink models offer the possibility to generate source code for **various target hardware platforms** automatically including PLCs and embedded systems. The models can be **continuously integrated into MiL and HiL test systems** early, improving the software development process significantly.

Our **MPSoC target** allows users to develop their application in MATLAB Simulink for **AMD Zynq® Ultrascale+™ MPSoC systems** and automatically load and run it on the desired hardware with a single click.

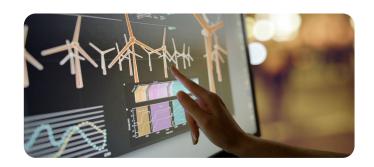




PLC Application and Firmware Development

Through many years of experience, we have built an **extensive skillset** in the entire field of PLCs (programmable logic controllers). We cover classic **IEC61131 development** as well as application and firmware development.

We have a lot of experience with products from Phoenix Contact, Beckhoff, Bachmann, Siemens and other well-known manufacturers.



SCADA and IIoT

We create **SCADA software solutions** seamlessly integrated with the **latest IIOT advancements.**

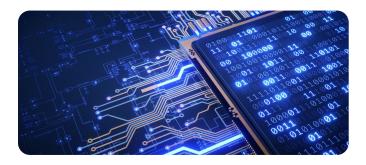
We offer a lot of experience with different programming languages & database systems and container technologies. Embracing **microservices architecture** ensures **scalability and resilience** in our backend, while our Web HMI development enhances frontend interactions. With a focus on innovation, we seamlessly integrate the latest **Industry 4.0 advancements.**

Sokratel's Cumulocity Connector App allows users to connect PLCnext devices from Phoenix Contact with the Cumulocity IoT platform, a product of Software AG. The app provides the standardized device management features from the platform.

Experts for Model-Based Design, Control Systems and Industrial Communication







Embedded Systems

Our embedded systems team provides **customised drivers and embedded applications** for a wide range of complex tasks for **various operation systems** (e.g., Baremetal, Real-Time Operating System, Embedded Linux) and **platforms** (e.g. Microcontroller, FPGA, SoC), if necessary, with Hypervisor. The systems we develop have demonstrated **high performance in critical infrastructure** applications.



© 2024 Copyright | Speedgoat

Automated Testing & Hil Testing

Our services cover **your test benchs entire lifecycle,** from planning to commissioning. We assist in selecting the most suitable test automation tools, creating efficient and reliable test cases based on specifications. Automated execution and thorough result analysis enable you to identify weaknesses, address issues, and optimize your test processes, ensuring products meet the **highest quality standards.**

FATIS is the Framework for Automated Tests in Industry by Sokratel, which allows the starting and configuring of testsuits without directly accessing test benches. It distributes the test tasks to all available test benches. The **scalability** of FATIS guarantees the **best possible load factor** for your test resource.



You want to learn more?
Scan the QR-Code to explore our
website or contact us!

Industrial Communication

Our expert teams develop innovative software products to improve communication for **real-time critical application.** We are a proud member of the **OPC-UA Foundation** and the **PROFIBUS Nutzerorganisation e.V.** (**PNO**) and have in-depth experience in CAN, OPC-UA, Modbus, MQTT, Profinet, TSN and more. We provide **support and customized solutions** for the sustainable integration into your existing automation network.





Key facts about Sokratel

Foundation: 1994Employees: 135

Headquarter: Augsburg

• Locations: Augsburg, Bochum, Hamburg, Kiel,

München

• Quality Management: DIN ISO 9001:2015

• Information Security: TISAX Level 3 (Based on ISO 27001)

