

ENGINEERING COMPETENCE CENTER FOR INDUSTRY -**LEADING PRODUCT DEVELOPMENT**

KEY BUSINESS UNITS



DIGITALIZATION AND SOFTWARE DEVELOPMENT

Data connectivity solutions, IT-OT connectivity, applied artificial intelligence, data gateway services

EMBEDDED SYSTEMS AND AUTOMATION



Embedded software concept and realization, PCB planning, schematics, prototyping, troubleshooting and refurbishing, FPGA design and verification, firmware development, architecture designs, PLC system development and programming



POWER ELECTRONICS AND ELECTROMOBILITY

Conceptual design, design verification, prototype implementation, prototype testing, module calculations, return part analysis



MEASUREMENT AND TEST SYSTEMS

End-of-line and in-line testing, 2D & 3D optical test systems, completeness, color, surface, and geometry testing, electrical test systems, board test, boundary scan, quality control and function testing, feasibility studies

TECHNOLOGY EXPERIENCE









VECTOR >





sonarqube





































DIGITALIZATION AND SOFTWARE DEVELOPMENT



INDUSTRIAL DIGITALIZATION

- Frontend architecture
- UI / UX development
- Test automation & manual testing
- Data visualization

TECHNOLOGY EXPERIENCE





































APPLIED ARTIFICIAL **INTELLIGENCE**

- Natural language processing (NLP AI)
- · Web-based application development
- Frontend & backend programming



IOT SOFTWARE SOLUTIONS

- Data management & aggregation
- Scrum-based development
- Data gateway services



DEVOPS SERVICES

- Microservice architecture
- CI, CD, Docker expertise
- Supervising DevOps delivery pipeline

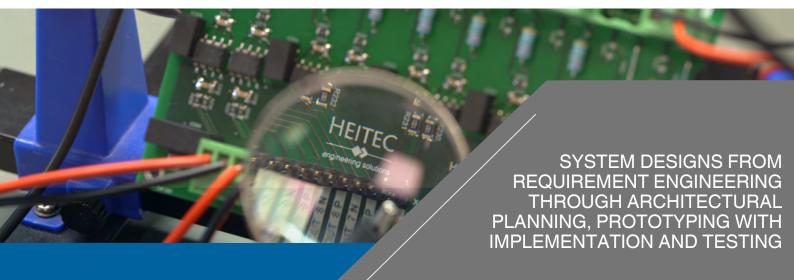












EMBEDDED SYSTEMS AND **AUTOMATION**

TECHNOLOGY EXPERIENCE





































EMBEDDED SYSTEMS





- Embedded hardware planning, schematics, prototyping
- PCB troubleshooting and refurbishing
- FPGA/ASIC design and verification

AUTOMATION



- Software and hardware architecture designs for production machines and systems
- PLC software development
- Electrical design
- Data acquisition and tracking system development
- **OPC** interface communication
- Standardization









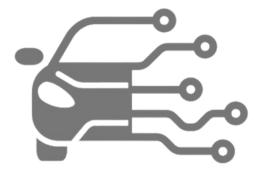


POWER ELECTRONICS AND EMOBILITY



PROTOTYPE TESTING

- · In-circuit testing
- Board and system level test
- Low and high voltage tests
- · Wide temperature range
- Manual and automated test



SPECIAL EXPERTISE IN EMOBILITY PROJECTS



CALCULATION

- Worst case analysis
- Check of component selection
- Lifetime calculation
- Temperature rise calculation
- ISO pulse stress analysis



RETURN PART ANALYSIS

- Fault history evaluation
- Defected component analysis
- Root cause analysis













MEASUREMENT AND TEST SYSTEMS









ELECTRICAL TEST SYSTEMS

- PCB assembly testing
- FCT functional testing
- ICT electrical component testing
- EOL product testing

VISUAL TEST SYSTEMS



- · Completeness and quality control
- Color and surface control
- Form and geometry measurement
- Function and safety check
- · Automated measuring and testing equipment
- · Assembly solutions and assembly control
- Feasibility studies and plant support









