INDUSTRY 4.0 TECHNOLOGIES

TECHNOLOGY EXPERTISE

AUGMENTED REALITY
- Advanced 3D graphic interaction systems
- Physically-based animation
- Virtual reality, immersive interaction and geometric & volume modeling

CYBERSECURITY
- Logical security. Audits, penetration tests for heterogeneous networks and forensic analysis
- High availability infrastructure
- Intrusion detection and intrusion response mechanisms

COLLABORATIVE & AUTONOMOUS ROBOTS
- Human-machine communication interfaces (dialog systems)
- Advanced information models for knowledge generation and learning
- Perception systems: vision to control and guide robots

THE INDUSTRIAL INTERNET OF THINGS
- Industrial communication
- Artificial intelligence
- Intelligent monitoring of industrial processes
- Energy saving through smart monitoring
- Sensor system and data extraction

DATA SCIENCE
- Big data analytics
- Data graphs
- Advanced statistical analysis
- Control panels and decision support systems

ADDITIVE MANUFACTURING
- Rapid prototyping
- 3D Printing
- Stereolithography (SLA)
- Selective Laser Sintering (SLS)
- Fused Deposition Modeling (FDM)

ADVANCED MANUFACTURING TECHNOLOGIES
- Techniques for controlling and monitoring process/product quality
- Flexible manufacturing processes
- Advanced decision-making tools for Zero Defects Manufacturing (ZDM)
- Digital control with microprocessors and Digital Signal Processing (DSP)
- Human-machine collaboration
- Computer vision
- Assessment of environmental impact
INDUSTRY 4.0 TECHNOLOGIES

AREAS OF APPLICATION

- Synchronized Enterprise
- Robotics
- Logistics
- Industrial Automation & Communication
- Energy Efficiency
- Waste Optimization
- Dynamic Supply Chain Networks
- Innovative Consumer Delivery
- Industrial Design

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