

TECHNOLOGICAL KNOWLEDGE & COMPETENCES

For company and investors

FINTECH

GREEN TECH

SECURITY & SAFETY

E-GOV

AEROSPACE & AERONAUTICS

DOMOTICS, INTERNET OF THINGS

FOOD

FUTURE MEDIA

HEALTH & LIFE SCIENCE

SMART COMMUNITIES

AUTOMOTIVE

AUTOMATION

SOFTWARE FOR ICT

ELECTRONICS

BUSINESS INTELLIGENCE



FONDAZIONE
BRUNO KESSLER

CONTROL FRAMEWORK

FINTECH

Analysis and processing of written text
Data mining and predictive analytics
Customer behaviours
Knowledge management systems and information extraction

GREEN TECH

Concentrated Solar Power (CSP) technologies and micro cogeneration
Energy efficient networked embedded system
Smart buildings & Communities for environment sustainability
Internet of services
Energy efficiency analysis and new energetic solution with hydrogen
Production of new functional high-tech materials (coating)
MEMS for radiofrequency transmission

SECURITY & SAFETY

Acoustic, video and image analysis
Analysis and mapping of organizational processes
Management of linguistic resources and information extraction
Multispectral and Terahertz detectors
Cloud-based service-oriented applications and infrastructure
Sensor Characterization and Calibration
High resolution geo data (GIS), earth monitoring and mapping
Web-based authentication and authorization protocols, mobile security
Design, development and verification of embedded systems
Landscape epidemiology and Proteomics for analysis

E-GOV

Analysis and mapping of organizational processes
Analysis and processing written of text
Machine translation
Data mining and predictive analytics



AEROSPACE AERONAUTICS

Earth monitoring and mapping by 3D image sensors
Sensors characterization and calibration
Design, development and verification of embedded systems
Energy efficiency analysis and new energetic hydrogen solutions
Production of new functional high-tech materials (coating)
MEMS for radiofrequency transmission
Multisensor Homogenization and changed detection
Modeling and Mitigation of Registration Noise

LIFE QUALITY IMPROVEMENT

DOMOTICS, INTERNET OF THINGS

Image understanding, analysis and modelling with 3D sensors
Acoustic analysis: distant - speech interaction and acoustic room simulations
Augmented reality
Design for quality of life and smart interfaces
Energy efficient in complex network and embedded systems
Sensors Characterization and Calibration
Design, development and verification of embedded systems and new materials
Internet of services

FOOD

Data mining and predictive analytics
ICT for large-scale retail, microfluidic sensors for control and safety
Patients/citizens health condition monitoring tools
Proteomics and epidemiology

FUTURE MEDIA

Augmented reality
Image understanding and analysis, video monitoring
Machine translation
Management of linguistic resources, process of written text
Music Signal analysis
Customer behaviours and marketing virality



HEALTH & LIFE SCIENCE

3D sensors to understand images and video analysis
Brain inspection for analysis and data modelling
Augmented reality
Design for quality of life and smart interfaces
ICT tools to monitor patients/citizens and their health condition
Integrated management of patients with chronic diseases
Multispectral and Terahertz detectors
Silicon Photomultipliers
Wearables, body sensors and actuator networks
Engineering and functionalization of surfaces and nanostructures
Proteomics and epidemiology

SMART COMMUNITIES

Acoustic scene analysis and image understanding
Cloud-based security and service-oriented applications and infrastructure
Smart buildings, interfaces & mobility
Web-based authentication and authorization protocols
Collective systems
Data mining and predictive analytics
Energy efficiency analysis and high resolution geo data (GIS)
ICT open platforms and solutions to support community and citizens (Internet of services)

AUTOMOTIVE

Monitoring and video analytics (3D image sensors)
Acoustic analysis and simulation of room acoustic
Design, development and verification of embedded system
Augmented reality and image understanding
MEMS for radiofrequency transmission and control
Production of new functional high-tech materials (coating)
New hydrogen technologies
Sensor Characterization and Calibration
Code analysis and testing
Smart Interfaces
Software engineering and requirement analysis



INDUSTRY INNOVATIONS

AUTOMATION

Video and acoustic data collection, analysis and augmented reality
Design, development and verification of embedded systems
Multispectral and Terahertz detectors
Sensors Characterization and Calibration
Collective systems and internet of services

SOFTWARE FOR ICT

Cloud-based and mobile security, service-oriented applications and infrastructure
Web-based authentication and authorization protocols
Data mining and predictive analytics
Design, development and verification of embedded systems
Code analysis and testing
Software engineering and requirement analysis

ELECTRONICS

Specific sensors design, realisation and testing
3D Image sensors
Multispectral and Terahertz detectors
Silicon Photomultipliers
Microfluidic sensors
MEMS for Radiofrequency transmission
New functional innovative materials

BUSINESS INTELLIGENCE

Analysis and mapping of organizational processes
Machine translation, system and software engineering, code analysis and testing
Cloud-based and mobile security and service-oriented applications and infrastructure
Smart Interfaces
Web-based authentication and authorization protocol
Study of customer behaviours and marketing virality
Information extraction, analysis and predictive data mining
Design, development and verification of embedded systems

HOW TO WORK WITH US

CUSTOMIZED SOLUTIONS

We can provide customized solutions to match your technological needs. We will improve your products/services value through our professional skills and cutting edge technologies.

INTELLECTUAL PROPERTY

We offer the possibility to use our research results. We license our existing patents portfolio on a contractual and personalized basis and share with you the ownership of new **patents**.

START UP

We mentor and incubate start-ups and help them to enter the market. You can join the process and be part of our start-ups future, as an investor or as a new client.



FACILITIES & LABS

Clean Room for design, fabrication and testing of microsystems, micro-devices and sensors; New Materials Lab for micro-nano characterization and fabrication of new materials; Laboratory of Biomolecular Sequence and Structure Analysis for Health.

CONTACT US

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(AIRT)

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