The ISTI Library was founded in 1954. Since 2000 is part of the Library Service and Scientific Documentation Centre of the CNR Research Area in Pisa.
The Library works to support the research activities and the researchers. The staff takes care of and enhances the bibliographic and documentary heritage of ISTI and the other institutes belonging to the CNR Research Area.

The Library is involved in the fields of Grey Literature (GL), Digital Libraries, and institutional archives. The Library subscribes and promotes the principles and actions of the Open Science community, giving information about national and international initiatives and managing services for the institutes located in the Area and the interested authors.

The Library staff manages the ISTI scientific production and supports the authors in the research assessment procedures.

The descriptions of ISTI laboratories research activities are extracted from ISTI laboratories brochures. Other info are available here.

THE WIRELESS NETWORK (WN) LAB MISSION IS TO INVESTIGATE, DEVELOP AND PROTOTYPE INNOVATIVE SOLUTIONS IN CYBER-PHYSICAL SYSTEMS FIELD, BUT THE DEVELOPED TECHNOLOGIES HAVE MUCH WIDER APPLICATION OPPORTUNITIES. WN LAB FOCUS HIS WORK IN THE DESIGN OF NEW ALGORITHMS AND TOOLS RANGING FROM THE SMART CITIES TO INTELLIGENT TRANSPORTATION SYSTEMS, AND FROM AMBIENT ASSISTED LIVING SYSTEMS TO MONITORING SYSTEMS.

THE FORMAL METHODS AND TOOLS (FMT) LAB HAS LONGSTANDING EXPERIENCE IN THE DEVELOPMENT AND APPLICATION OF FORMAL NOTATIONS, METHODS, AND SOFTWARE SUPPORT TOOLS FOR THE SPECIFICATION, DESIGN, AND VERIFICATION OF COMPLEX SYSTEMS. THE FMT LAB IS ALSO ACTIVE IN REQUIREMENTS ENGINEERING AND IN VARIOUS BRANCHES OF SOFTWARE ENGINEERING, AND IN THE AREAS OF COMPUTER ETHICS AND INFORMATION TECHNOLOGY AND SOCIETY.

THE SOFTWARE ENGINEERING AND DEPENDABLE COMPUTING (SEDC) LAB DEVELOPS NOVEL INTEGRATED METHODOLOGIES, ROOTED ON THE SYNERGY BETWEEN SOFTWARE ENGINEERING AND DEPENDABLE COMPUTING DISCIPLINES, TO FACE THE CONTINUOUS EVOLUTION AND RISING CRITICALITY OF SOFTWARE-INTENSIVE SYSTEMS.

THE SYSTEM AND SOFTWARE EVALUATION CENTER (SSE) LAB PERFORMS THIRD-PARTY EVALUATION AND CERTIFICATION OF PROCESSES AND PRODUCTS IN THE AREA OF INFORMATIONTECHNOLOGY, ACCORDING TO GIVEN REQUIREMENTS AND STANDARDS TO MEET THE NEEDS OF USERS, INDUSTRY AND PUBLIC ADMINISTRATION. INDUSTRIAL CHALLENGES, DEMANDS AND NEEDS IN SYSTEM AND SOFTWARE DEVELOPMENT PROCESSES, ARE THE DRIVERS OF THE SSEC RESEARCH ACTIVITY.

THE ARTIFICIAL INTELLIGENCE FOR MEDIA AND HUMANITIES (AIMH) LAB HAS THE MISSION TO INVESTIGATE AND ADVANCE THE STATE OF THE ART IN THE ARTIFICIAL INTELLIGENCE FIELD, SPECIFICALLY ADDRESSING APPLICATIONS TO DIGITAL MEDIA AND DIGITAL HUMANITIES, AND TAKING ALSO INTO ACCOUNT ISSUES RELATED TO SCALABILITY.

THE HUMAN INTERFACES IN INFORMATION SYSTEMS (HIIS) LAB RESEARCH ACTIVITY AIMS TO ADDRESS FUNDAMENTAL QUESTIONS ON THE INTERACTION BETWEEN PEOPLE AND TECHNOLOGIES AND FOCUSES ON METHODS AND TOOLS TO SUPPORT USER INTERFACE DESIGNERS, SOFTWARE DEVELOPERS, AND END USERS IN OBTAINING SYSTEMS THAT CAN BE ACCESSED FROM ANY CONTEXT OF USE IN SUCH A WAY TO IMPROVE USABILITY, ACCESSIBILITY, AND USER EXPERIENCE.

THE INFRASTRUCTURES FOR SCIENCE (INFRASCIENCE) LAB MISSION IS TO CONTRIBUTE TO THE EVOLUTION OF SCIENCE PRACTICES BY INVESTIGATING, EXPERIMENTING, AND CLOSELY CONNECTING RESEARCH AND DEVELOPMENT OF INNOVATIVE DIGITAL INFRASTRUCTURES, INFORMATION SYSTEMS, AND SMART SOLUTIONS FOR FOSTERING AND EMPOWERING DATA-CENTERED RESEARCH.

THE KNOWLEDGE DISCOVERY AND DATA MINING (KDD) LAB IS A JOINT RESEARCH INITIATIVE OF ISTI INSTITUTE OF CNR AND THE DEPARTMENT OF COMPUTER SCIENCE OF THE UNIVERSITY OF PISA. THE OBJECTIVE OF THERE SEARCH UNIT IS THE DEVELOPMENT OF THEORY, TECHNIQUES AND SYSTEMS FOR EXTRACTING AND DELIVERING USEFUL KNOWLEDGE OUT OF LARGE MASSES OF DATA.

THE HIGH PERFORMANCE COMPUTING (HPC) LAB CARRIES OUT RESEARCH ON INFORMATION INDEXING AND RETRIEVAL, LARGE-SCALE DISTRIBUTED/CLOUD SYSTEMS, BIG DATA ANALYTICS, MACHINE LEARNING AND ARTIFICIAL INTELLIGENCE, MOBILITY ANALYSIS AND SEMANTIC ENRICHMENT.

THE SIGNALS & IMAGES (SI) LAB GOAL IS TO INCREASE THE KNOWLEDGE IN THE FIELDS OF SIGNAL PROCESSING, IMAGE UNDERSTANDING, AND ARTIFICIAL VISION, IN BOTH THEORETICAL AND APPLICATIVE CONTEXTS. THIS GOAL WILL BE ACHIEVED BY STUDYING AND DEVELOPING MODELS, COMPUTER-BASED METHODS, INTELLIGENT SYSTEMS AND MACHINES FOR THE FORMATION, ELABORATION, ANALYSIS, AND RECOGNITION OF IMAGES AND SIGNALS, AND THEIR APPLICATION IN THE SOCIETY.

THE VISUAL COMPUTING (VC) LAB FOCUS HIS WORK ON THE DESIGN OF NEW COMPUTER GRAPHICS TECHNIQUES, WITH A SPECIAL FOCUS ON GEOMETRY PROCESSING, LEARNING, ACQUISITION, VISUALIZATION, AND PHYSICAL REPRODUCTION. THE VC LAB APPLICATION FIELDS INCLUDE CULTURAL HERITAGE, ENVIRONMENTAL MONITORING, DESIGN, AND ARCHITECTURE.

THE MECHANICS OF MATERIALS AND STRUCTURES (MMS) LAB CARRIES OUT RESEARCH, SOFTWARE DEVELOPMENT AND CONSULTING IN THE FIELD OF CONTINUUM MECHANICS, WITH PARTICULAR FOCUS ON STRUCTURAL ENGINEERING. MAIN RESEARCH TOPICS ARE: COMPUTATIONAL SOLID MECHANICS, MECHANICS OF MASONRY STRUCTURES, STRUCTURAL HEALTH MONITORING OF HISTORIC BUILDINGS.

THE SPACE FLIGHT DYNAMICS (SFD) LAB IS ACTIVE IN THE FIELDS OF ORBITAL DEBRIS MODELING, MITIGATION AND REMEDIATION, REENTRY PREDICTIONS OF UNCONTROLLED SPACECRAFT AND ROCKET BODIES FOR CIVIL PROTECTION APPLICATIONS, SPACE EXPERIMENTS FOR FUNDAMENTAL PHYSICS, MISSION ANALYSIS, INCLUDING FLIGHT OPERATIONAL SUPPORT, AND ASTRODYNAMICS.

NETWORKING
WIRELESS NETWORKS (WN)

SOFTWARE
FORMAL METHODS AND TOOLS (FMT)

SOFTWARE, ENGINEERING & DEPENDABLE COMPUTING (SEDC)

SYSTEM AND SOFTWARE EVALUATION (SSE)

KNOWLEDGE
ARTIFICIAL INTELLIGENCE FOR MEDIA AND HUMANITIES (AIMH)

HUMAN INTERFACES IN INFORMATION SYSTEMS (HIIS)

INFRASTRUCTURES FOR SCIENCE (INFRASCIENCE)

KNOWLEDGE DISCOVERY AND DATA MINING (KDD)

HIGH PERFORMANCE COMPUTING
HIGH PERFORMANCE COMPUTING (HPC)

VISUAL
SIGNALS AND IMAGES (SI)

VISUAL COMPUTING (VC)

FLIGHT AND STRUCTURAL MECHANICS
MECHANICS OF MATERIALS AND STRUCTURES (MMS)

SPACE FLIGHT DYNAMICS (SFD)

Istituto di Scienza e Tecnologie dell'Informazione "A. Faedo"
Consiglio Nazionale delle Ricerche

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