📝 Transfei

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ETIS AI · ROBOTICS · INFORMATION PROCESSING

UMR 8051 CNRS/ENSEA/CYU 62 teacher-researchers 73 doctoral and postdoctoral researchers

ETIS is the main joint research unit (UMR) in the field of information science and technology on the Cergy site and in the north-west of Ile-de-France.

ETIS conducts theoretical and experimental research to design and optimise increasingly complex systems, and learning methods for intelligent systems that need to be flexible and adaptive.

This research has also led to technological advances in telecommunications and health.

KEYWORDS SCIENCE

• Multimedia data indexing

- and data integration
- Imaging
- \cdot Digital communications
- \cdot Neurocybernetics
- Reconfigurable
- systems-on-a-chip
- Neural networks
- ٠AI

Security

KEYWORDS

Robotics

Mobility

• Health

APPLICATIONS

APPLICATIONS AND INDUSTRIAL SECTORS

- E-Health
- Data mining
- · Reliability of electronic and storage systems
- Intelligent and green radi
- · Interactive and autonomous robotics
- Smart grid intelligence
- Internet of things



KNOW-HOW · SKILLS · EXPERTISE · SPECIFIC FEATURES

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RNA

Learning and optimisation

Bioinspired cognitive modelling, cognitive robotics, ML for computer vision, green telecommunication systems, information and game theory

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Large scale intelligent processing

 Data mining for social networks, cultural heritage sciences, life sciences and medicine, distributed telecommunications networks, 6G communication, semantic communication, secure communication, IoT

Intelligent embedded systems

Analogue and digital electronics, autonomous systems, small footprint systems, intelligent embedded systems for harsh environments

EQUIPMENT

- 79 pieces of equipment & 7 platforms
- Scientific computing platforms
- Mobility and robotics platform
- Movement workshop
- Intelligent embedded system platform
- Sound perception platform
- · Digital heritage data platforr
- Video capture platform

PATENTS · SOFTWARE

- 13 active patents
 - Decoding, image processing, real time polyp detection, etc.
 - 4 software programs / codes filed
- Big data, image and video indexing

INDUSTRIAL PARTNERSHIPS · SPIN-OFFS

2 spin-offs

SEQUENCIA - developing solutions for multimodal video analysis, sequencing, and indexing, particularly in sports

- AUGMENTED ENDOSCOPY developing artificial intelligence solutions and innovations for gastroenterologists
 - 10 to 15 industrial collaborations per year
- Fondation Léonie Chaptal, EXPERTIME, APSYS, VEDECOM, IDEMIA, ROBOCOL
 - SATT maturation project
- Algorithm for robotics

