

Robust machine learning algorithms in embedded devices to obtain novel insights and enable real-time decision making while ensuring system security and the privacy of users.

Competitive advantage

- Fundamental and multidisciplinary expertise in real-time embedded analytics for Internet of Things (IoT) and networked systems that can provide:
- Novel business, environmental and system insights through seamless noninvasive monitoring
- Security of networked systems
- Minimal privacy risk for users, and
- Improvements in the overall performance and usability of networked systems
- This technology has demonstrated widespread application in:
- Detection of malicious mobile apps
- · Real-time continuous identification of individuals and machines
- Energy efficient sensing of user activities
- Detection of anomalous operation of networks and devices
- Voice biometric systems and countermeasures to spoofing attacks

Impact

• Better security and improved usability of networked systems

Successful applications

- Automatic inference of user emotion and mental state
- Creation of a 'breathprint' for continuous user identification and authentication

Capabilities and facilities

• State of the art laboratories equipped with a multitude of sensors, wearables, and state-of-the-art equipment for signal capture and analysis

More Information

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