

# Open Innovation Challenges

**DO YOU HAVE THE  
SOLUTION?**

## **Innovation Challenge**

5G-Enabled Home Security: Improving home security through connected devices

5G-Enabled Augmented Reality Training: Improving athletic performance through augmented reality

## **Overview and Challenge**

5G-Enabled Home Security: Improving home security through connected devices

**Research fields:** Home automation and Internet of Things (IoT) technology  
Cybersecurity for connected and mesh devices Human -  
computer interaction in home security systems

### **Possible patents to be discovered:**

Techniques for anonymization, detecting and preventing cyber threats in home security systems Systems for providing real -  
time monitoring, alerts and remediation to  
homeowners regarding potential security breaches.

### **Problems that have not been solved by the industry yet:**

Ensuring the privacy and security of sensitive information and data transmitted through connected devices Development of a user -  
friendly and intuitive interface for home security systems  
Integration of advanced machine learning algorithms for real - time threat detection and response on edge devices.

5G-Enabled Augmented Reality Training: Improving athletic performance through augmented reality

**Research fields:** Human -  
computer interaction in augmented reality environments  
Performance analysis and improvement in sports  
Augmented reality technology for training and education

### **Possible patents to be discovered:**

reality

Methods for enhancing physical skills and coordination using augmented reality Systems for monitoring and analyzing athletic performance in augmented reality environments Techniques for providing real - time feedback and guidance to athletes in augmented reality environments

**Problems that have not been solved by the industry yet:**

Efficient and effective tracking of athletic performance in augmented reality environments

Development of more immersive and realistic augmented reality training environments

Integration of wearable technology and biometric data with augmented reality training environments to provide more personalized feedback and analysis.

### **Eligibility**

Academic researchers from all disciplines are eligible to participate in this challenge.

### **Evaluation Criteria**

A multidisciplinary team that can address:

- 5G strategy execution and positioning
- Cybersecurity and Cybersilience
- Democratization of computer vision technologies
- Reinforce the use of analytics
- Development of a Proof-of-Concept
- Intellectual Property experience

### **Prize**

The winning solution will receive 5 000 euros.

### **Submission Deadline**

The submission deadline is 19th March.

If you're interested in participating in this challenge submit your proposal to ANI. We look forward to collaborating with you!

Um projeto:



AGÊNCIA NACIONAL  
DE INOVAÇÃO

Com apoio:



Cofinanciado por:



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