



This project is co-financed by the European Union
and the Republic of Türkiye



ICTürkiye2025
10 April, İstanbul

PRESENTER FULL NAME: **ŞENOL PİŞKİN**

ORGANIZATION: **İSTİNYE UNIVERSITY**

WORKSHOP NAME: **Workshop#1 Digital and
Smart Health**

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Description of the Organisation

Istinye University, founded in 2015 by the 21st Century Anatolian Foundation, builds on MLP Care Group's 29 years of expertise in healthcare. A research-focused institution, it excels in R&D, EU projects, and global collaborations. With 9 faculties, 2 vocational schools, and 1 institute, it serves 14,000+ students in 100+ programs. İSÜ supports innovation with 70+ labs, 29 R&D centers, and global partnerships, shaping the future through science, technology, and education.

ISU XR Lab is an innovative research lab at Istinye University in Istanbul Türkiye. Our lab has a history of VR projects including VR-based Wind Simulation with Wearables, Virtual City Environments for Psychology Studies, Virtual Surgery Planning Platforms for Hemodynamics Simulations, Haptic Hands Interactions, and Robotics. Led by Dr. Şenol Pişkin, the lab's team of experts encompasses VR developers and designers, computer scientists, mechanical engineers, and healthcare technology professionals.

Lab equipment includes powerful workstations, virtual reality headsets, 3D printers, a 3D mouse and a haptic robotic arm. In our laboratory, applications such as medical image processing, 3D anatomy creation, medical device design, cardiovascular surgery planning and stent design are studied. Visualization of data with big data, physics-based virtual / augmented reality applications and human computer, human robot interactions are also areas of interest of our laboratory.

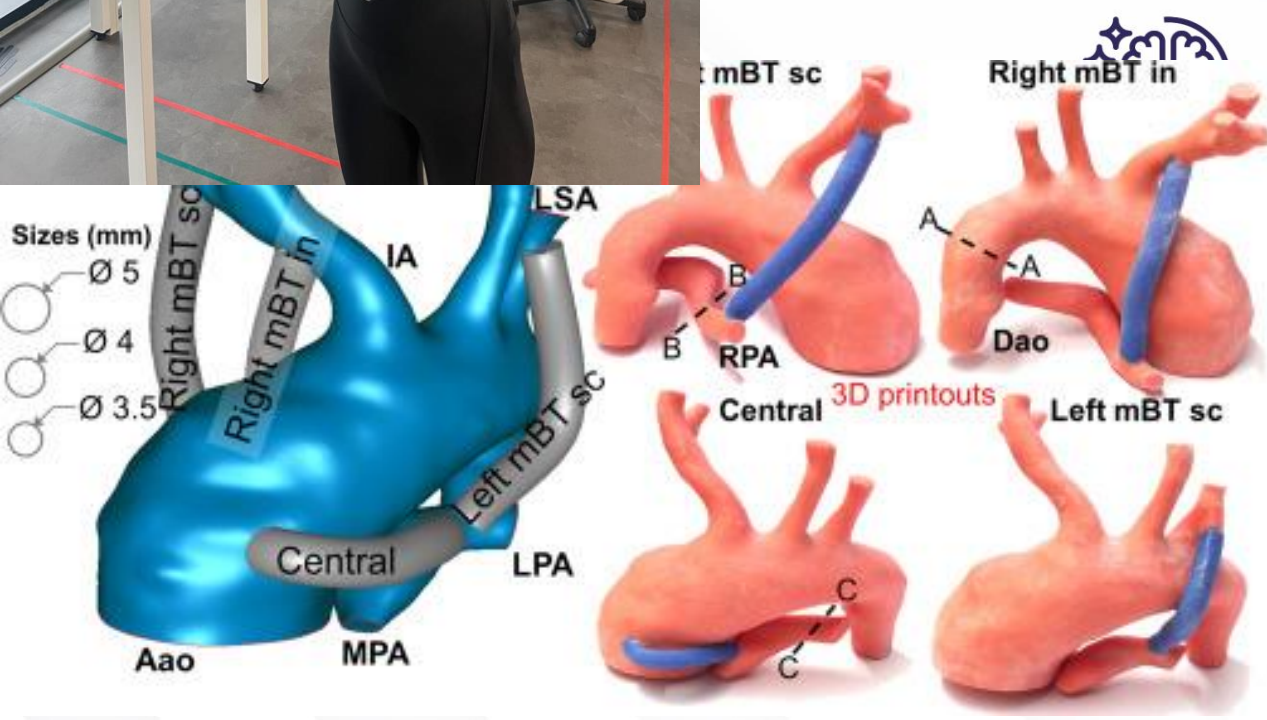
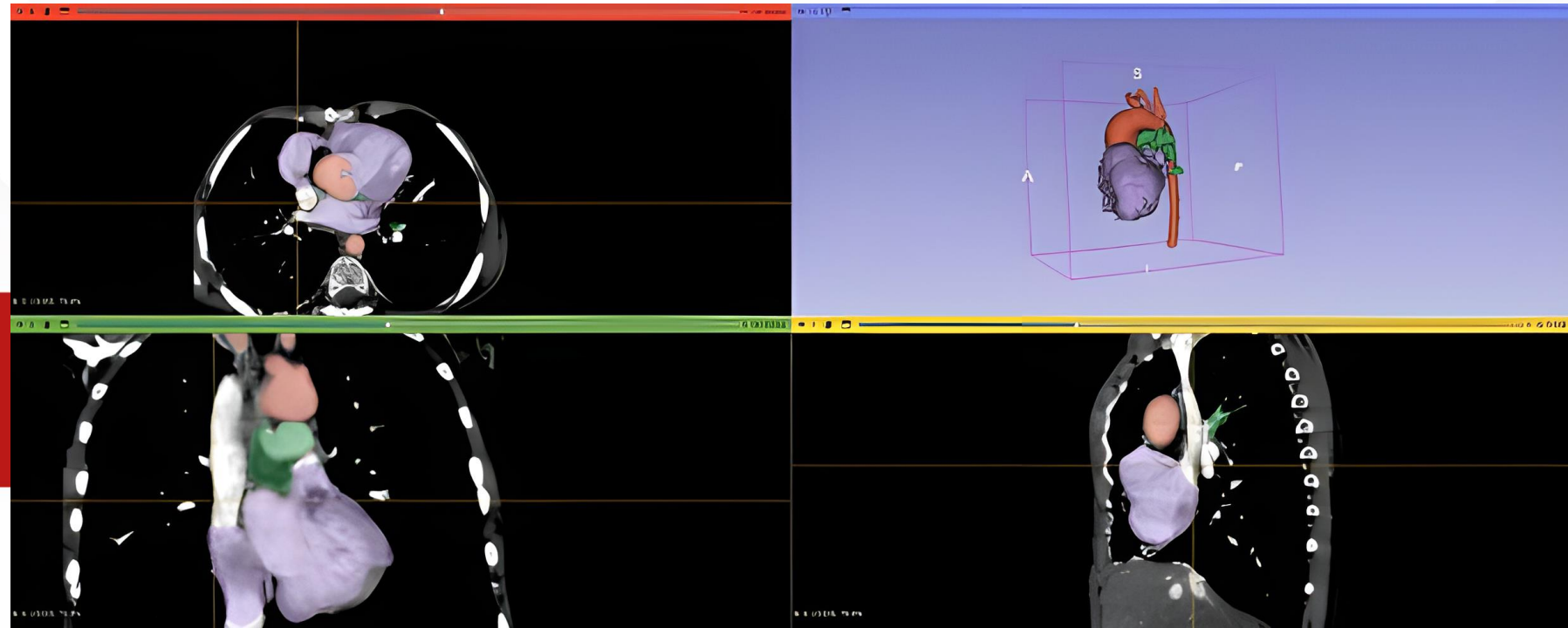


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Our lab

**Our R&D lab uses
these technologies
in order to
advance
healthcare and
quality of life.**





Your On-going Projects

**Augmented Reality Simulation and Wind (Flow)
Interaction Platform Development
Early Stage Pediatric Cardiovascular
Anomaly Detection**

**Deriving novel micro biomechanical
indices based on clinical imaging and
computational simulation data and
analysis using machine learning for
assessment of cerebrovascular and
cognitive health**

**Comparative error analysis of three-
dimensional modeling, three-dimensional
printing and three-dimensional scanning
methods used in orthodontics**

Non-invasive Iron Deficiency Detection



**Stethoscope with electronic augmented reality
control**



Project Idea

Call Topic: HORIZON-HLTH-2025-03-STAYHLTH-01- two-stage: Improving the quality of life of persons with intellectual disabilities and their families

Deadline Dates: 18 Sep 2025 (First Stage), 16 Apr 2026 (Second Stage)

❑ **Objectives:** Develop an AR-enabled remote therapy platform
Integrate AI-driven personalization
Embed gamification elements to boost engagement
Pilot and evaluate with target users and caregivers

❑ **Expected Results:** A fully functional AR-AI therapy platform
High user engagement
Demonstrable quality-of-life gains
Reduced caregiver burden

Project Idea

Call Topic: Cascade fundings

Deadline Dates: Any

- ☐ **Objectives: Digital health, Remote monitoring, augmented reality, wearable devices, surgical planning, robotics, smart systems, biosensors**
- ☐ **Expected Results:**

Consortium - profile of known partners (if any)

No	Partner Name	Type	Country	Role in the Project
01	ISU XR Lab	Univ.	Türkiye	Coordinator (gamification, VR)
02		Univ.		Data collection and processing
03		SME		Software development
04				
05				

Consortium – required partners

No	Expertise	Type	Country	Role in the project
01	Clinical Psychology Centre			
02	Physiotherapy / Rehabilitation Clinic			
03	Patient & Family Advocacy Association			
04	IT Security & Regulatory Compliance Partner			



<https://www.youtube.com/@isuxrlab>



<https://www.linkedin.com/company/isuxrlab>

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