



DIGITAL TEACHING

in natural scientific subjects

Anatomy 4D - Heart rate monitor

Augmented Reality (AR)

Augmented reality is a live view of a physical, real-world environment whose elements are "augmented" by computer-generated perceptual information, ideally across multiple sensory modalities, including visual, auditory, haptic, somatosensory, and olfactory.

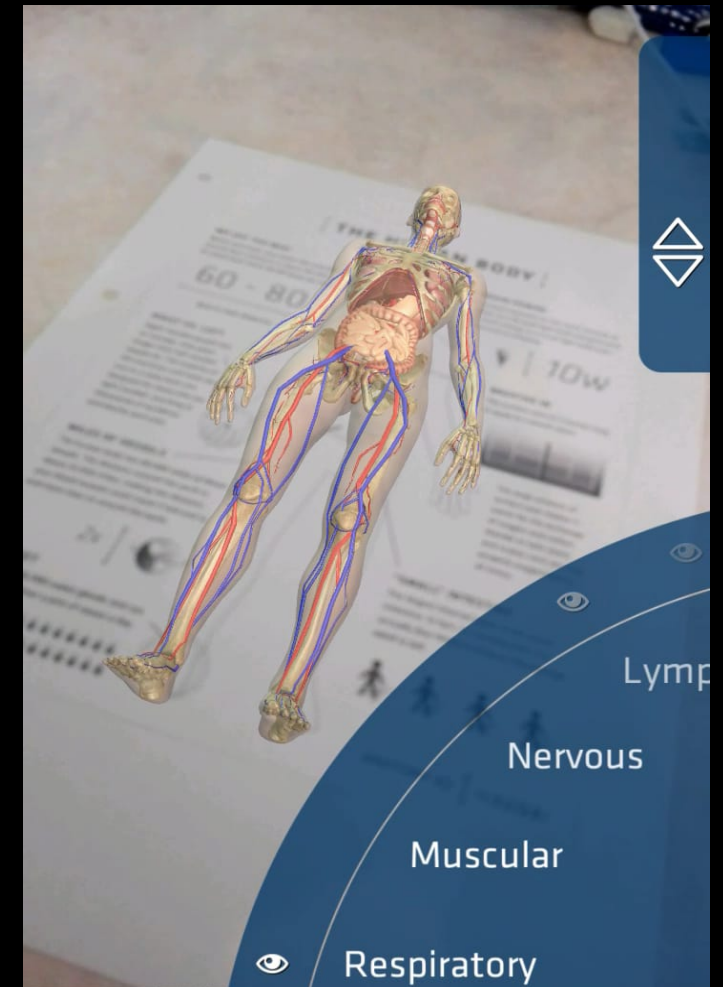
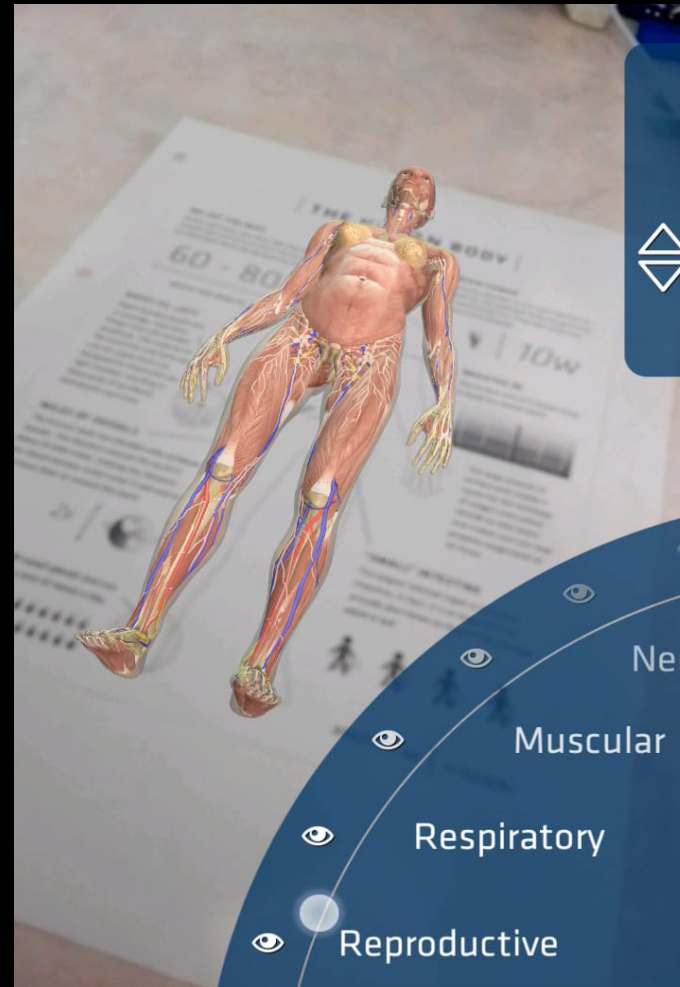
Augmented reality is used to enhance the natural environments or situations and offer perceptually enriched experiences.



Anatomy 4D

Through this free app and a simple printed image, Anatomy 4D transports students, teachers, medical professionals, and anyone who wants to learn about the body into an interactive 4D experience of human anatomy.

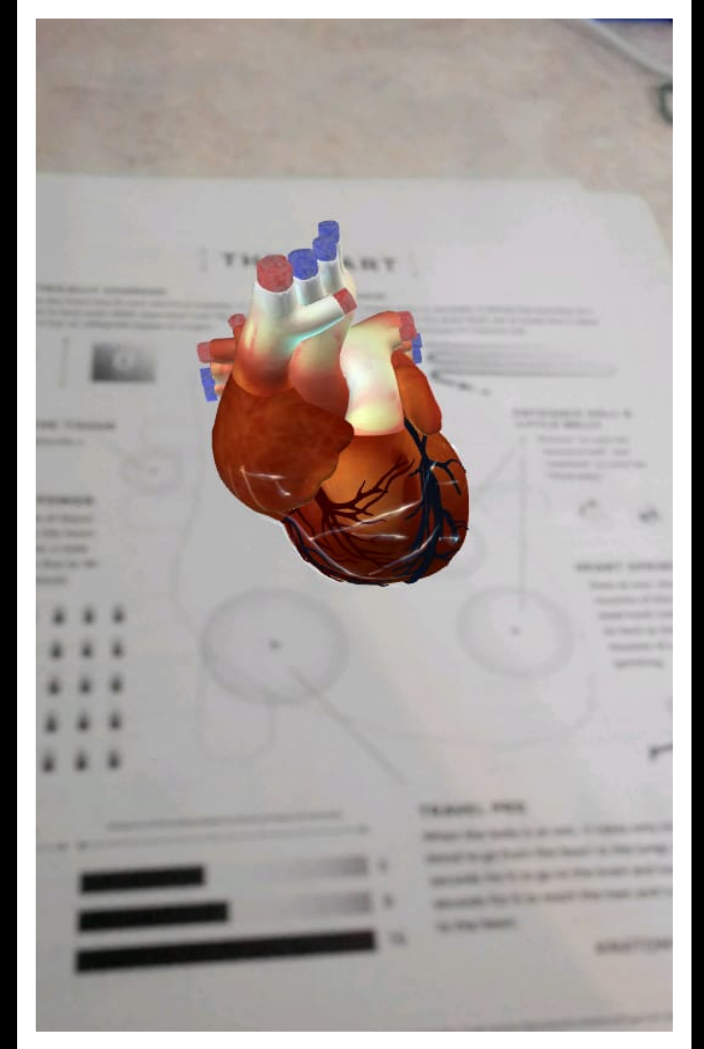
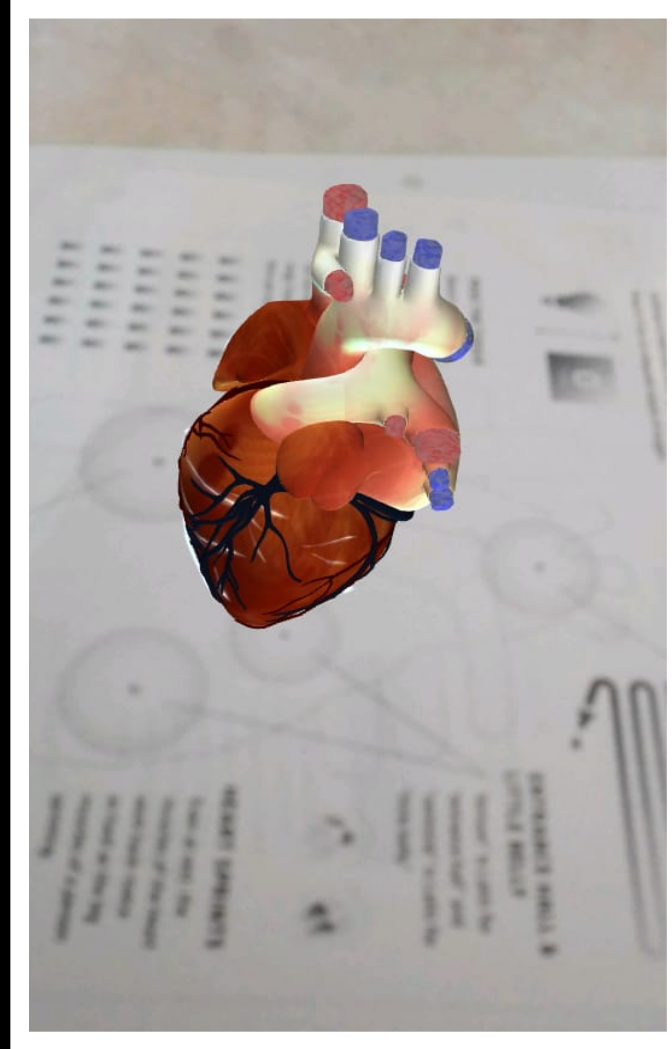
Visually stunning and completely interactive, Anatomy 4D uses augmented reality and other cutting edge technologies to create the perfect vehicle for 21st century education.



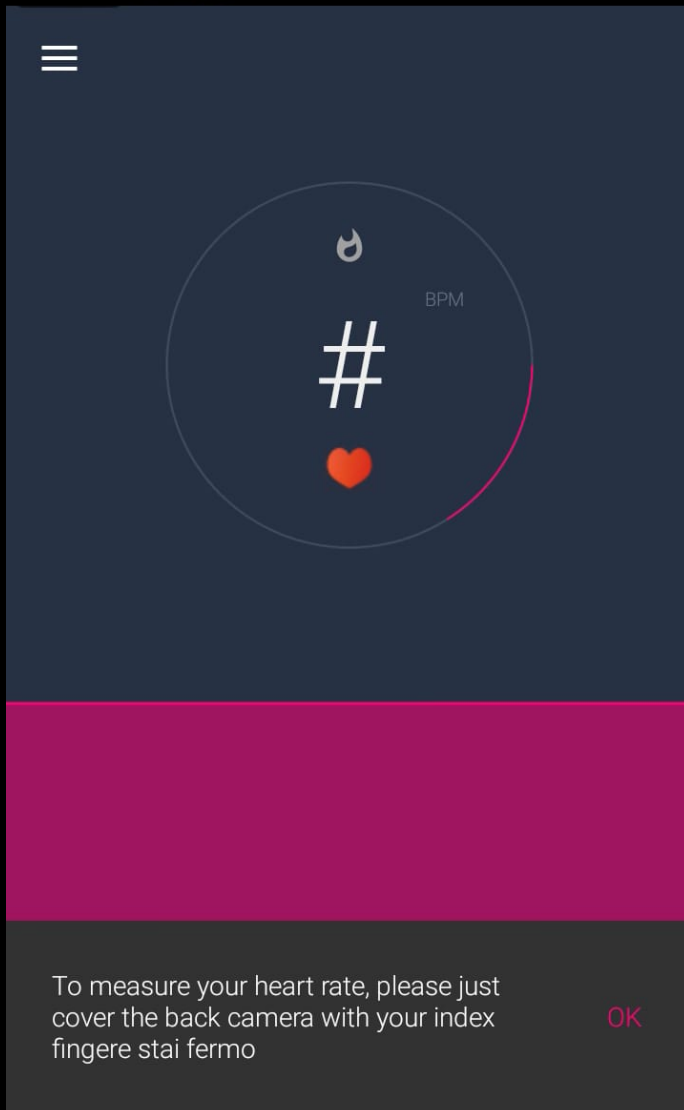
Anatomy 4D

So much more than an app, the Anatomy 4D experience takes viewers on a journey inside the human body and heart, revealing the spatial relationships of our organs, skeleton, muscles, and body systems.

This simple-to-use 3-dimensional learning environment is great for use in the classroom, or anytime.



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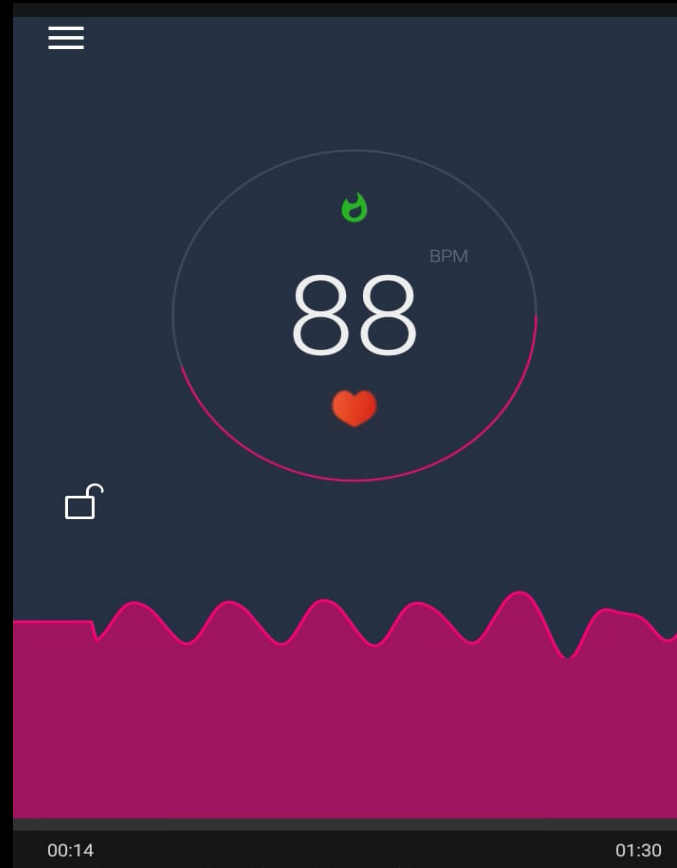


Heart Rate Monitor

This app read our heart rate through flash and camera. The camera sees the movement of the blood vessel thanks to the flash lighting .

Steps

- Press on «touch to start»;
- Put finger on the camera;
- Wait 15 seconds for the final misuration;
- You can save the result.



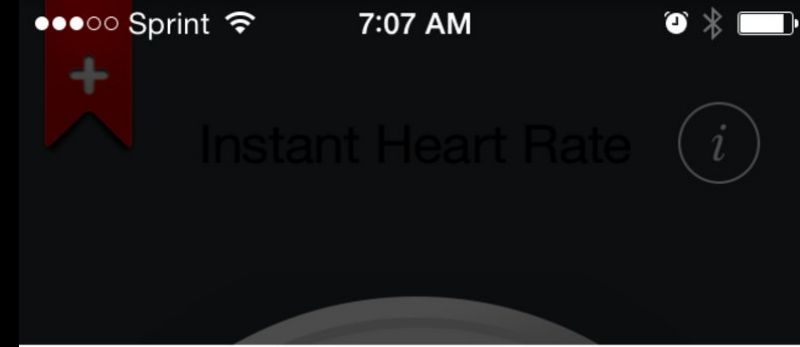
A screenshot of a mobile application interface for heart rate measurement. The background is dark blue. In the center, a large white circle contains the number '87' in white, with 'BPM' in smaller white text to its right. Below the circle is a white diamond icon followed by the text 'ETICHETTA' in white. At the bottom of the circle area, the words 'IGNORA' and 'SALVA' are written in white. Below the circle area, a dark grey box contains the text 'To measure your heart rate, please just cover the back camera with your index fingere stai fermo' in white. In the bottom right corner of this box, the word 'OK' is written in red.

How does it work?

With its camera and flash alone, your smartphone can measure your heart rate. That means that apps are available to track your heart rate, with the aim of helping you improve your health.

This simple process has a complicated name: **photoplethysmography**.

Every time the heart sends a pulse of blood through the body, the tiny capillary vessels in the skin expand. When a smartphone's flash illuminates the skin, its camera can capture the miniscule color changes that happen each time the heart beats.



Finger Position

Please place the tip of your index finger gently on the camera lens

