

## **DTU 3D Anatomical Simulation Technology Application Wins Second Prize in the Make-in-Vietnam Digital Award 2020**

On December 23, the Ministry of Information and Communications, in coordination with the Vietnam Chamber of Commerce and Industry (VCCI), announced the winners of the 2020 “Make in Vietnam” awards.



*DTU Provost and research team leader, Dr. Le Nguyen Bao, receives the Award*

Fifty products were selected from 239 nominations and then the top ten after 3 months of deliberation, reviews, presentations and appraisals. The DTU 3D Dental Anatomical Simulation Technology application won a second prize in the “Potential Digital Products” category and DTU was the only private Vietnamese university to receive an award.

### **The Make-in-Vietnam Digital Award 2020**

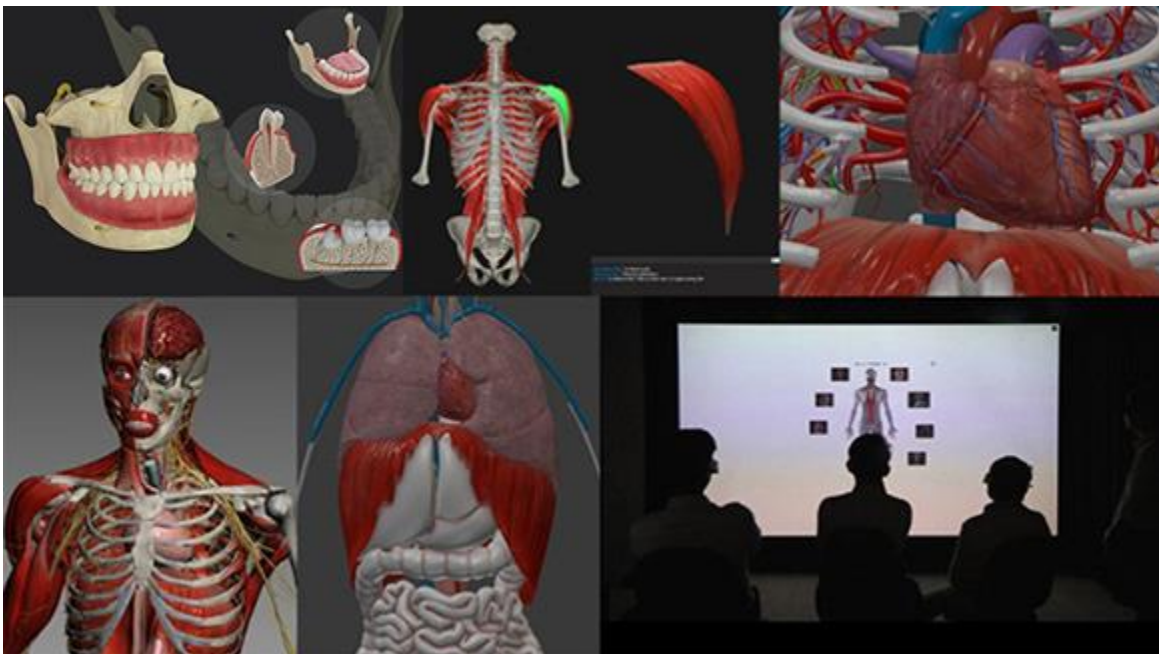
“Make - in - Vietnam Digital Award 2020” recognized digital solutions developed in Vietnam that showcase outstanding design and creativity to solve Vietnamese problems and benefit the economy, the

community and our everyday lives. Awards were presented in five categories, Outstanding Digital Platforms, Excellent Digital Products, Excellent Digital Solutions, Narrowing the Digital Gap, (urban and rural support for the disadvantaged to reduce the limitations of technology), and Potential Digital Products.

### **A 3D Virtual Reality application for Healthcare Study & Research**

The "3D Virtual Reality Application to Simulate the Human Body for Health Science Education & Research" model is the main application that DTU has researched and developed over several years, which has now almost completed and has been recognized for its positive contribution to medical education. It models human systems and organs, including simulations of the skeleton, muscles, vascular system, heart, nervous system, brain, respiratory system, digestive system, excretory and reproductive systems, glands and nodes. 3,924 simulations have been developed already to exactly model Vietnamese anatomical characteristics.

The DTU research team also created "3D Dental", to simulate teeth and teething, providing training information on teething age, oral-dental structure, anatomical phenomena, the insertion of implants and other basic treatment.



*"The 3D Virtual Reality Application"*

Students research documentation in English, Vietnamese and Latin and the application is used in Health Sciences at DTU, for study anytime, anywhere. They learn how to visualize each organ and specific

anatomical features interactively, by rotating, hiding, displaying, moving and marking with a 3D projector, 3D or VR glasses, desktop or handheld computers or smartphones.

DTU Provost and research team leader, Dr. Le Nguyen Bao explained: *"With our application, "The Anatomy of the Human Body, Teeth and Mouth", we aim to provide a broader understanding of the human body and replace the traditional theoretical teaching methods, that still exist in several Vietnamese medical schools, to provide students a way of broadening their experience and self-confidence in preparation for future careers."*

The product has received much constructive feedback from Health Sciences lecturers and DTU plans to continue to develop medical education applications with even more functionality.

*(Media Center)*