



## Safer Practice Healthier Patients

### What is SimSurgeon?

SimSurgeon is a developed **software designed for the training** of medical teams that uses **detailed, and accurate simulations** that are performed with the help of haptic controls. The purpose of SimSurgeon is to **help surgeons, doctors** and any other medical practitioners perfect their cardio surgeries.

### The Market

Surgical simulation market is valued 337.4\$ million in 2019. Our software aims to target **professional surgeons** to use SimSurgeon as a mean to perfect difficult cardiovascular surgeries, and also **medical schools** to teach **students** adequately with a hands on approach.

### Why You Should Choose SimSurgeon?

Surgery Simulation has always been seen as a way of practicing surgeries. SimSurgeon revolutionizes the concept as due to the level of **detail and accuracy** you get from the **artificial intelligence** that uses **ever expanding database** built by professionals. Unlike other products out there, with machine learning, it accounts for different outcomes and provides a different reaction accordingly. It becomes a way for medical students and surgeons to practice cardiovascular surgeries in a **safe environment minimizing the risk of error.**

### What is the problem?

**Cardiovascular diseases** are the **leading cause of death** globally and **250 000** people die every year due to **medical errors** only in US. Practice tools have been developed in the past to address this problem however these have **failed bring enough variation** to create an environment that the surgeons can practice different scenarios.

### The Hardware and Software

**Haptic VR** system is a way to mimic the feel of a specific object. This technology has been improved in the past years and currently available in the market. SimSurgeon uses this hardware technology along with its unique software to bring an **experience as close as to real life.**

The software is built by using a **database** which is composed of thousands of answers that the surgeons reflect for very detailed questions. This is then used to **train the neural network.** The results are perfected with direct pre-usage of the software by surgeons.

SIMUALTION PLATFORM DESIGN TO PERFECT THE SKILLS OF CARDIO SURGEONS  
EMPOWERED BY MACHINE LEARNING AND HAPTIC VR TECHNOLOGY