BACKGROUND
Segasist has developed learning software with the ability to complete tasks based on historical information. The software copies what it sees and becomes more accurate as it is used. The company wanted to improve the technologies it could offer its clients and learned through market research that there was a great need for a contouring technology for surgical/radiation treatment planning. Currently physicians have to locate and segment tissue in hundreds of diagnostic images of a patient’s affected body part, which is a tedious and meticulous process, even for experienced professionals.

Segasist wanted to develop a new contouring component that could be added to its existing learning software. A new algorithm needed to be created and Segasist did not have experience with this.

OUTCOMES
Partnered with UOIT through the ARC Initiative, they developed a component that could reduce segmentation time from hours to minutes. A physician could contour a few of the images and the learning software completes the rest.

The technology speeds up the time it takes to segment and process medical images and has the potential to protect healthy tissue from unnecessary radiation.

While the technology isn’t commercialized and needs further validation in the medical community, it does have the potential to make treatment faster, which is of value to medical professionals, patients and Segasist Technologies.