

Beyond Clean Artificial Intelligence Expert TM:

What is the Role of AI in Sterile Processing?

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AI (Artificial Intelligence) is everywhere. There is AI in healthcare (radiology), AI in the automotive industry (self-driving cars), AI in your phones (face recognition) - but what is it really, and how does it work?

In simplest terms - AI is just a computer replicating the learning process of a human. For example, when your smartphone is told multiple times that the face it's looking at is yours, it begins to learn to identify your face. This "learning" that happens is done through a few math equations, using high computer power - the result of which allows for machines like your computer and phone to recognize patterns, predict the future and solve problems.

But what applications would AI have in Sterile Processing? If you think about it, there is a lot of learning done by a human technician in sterile processing. Millions of instruments, thousands of trays, tens of variations - meaning that the learning process is complicated and can take up to 2 years for a new technician to feel comfortable packing trays accurately and efficiently.

For example, as Sterile Processing Departments face unprecedented technician shortages, training new staff has become a constant burden. Can we not use computers to "learn" the millions of instruments in all their variations and assist technicians in packing trays correctly and efficiently?"

The answer is - Absolutely! AI can shorten the onboarding time of new staff, pack trays faster with improved quality and assurance, optimize tray turns, and even manage maintenance according to regulations! In this expert series, we will explore how AI can transform Sterile Processing to increase performance, reduce human error and improve patient outcomes.

Have more questions for this expert? Contact Yesh at: yesh@scalpel.ai

Beyond Clean Artificial Intelligence Expert ™ Biography:

Yeshwanth Pulijala, PhD Founding Director & CEO Scalpel Ltd



Dr. Yeshwanth Pulijala (Yesh) is the founder and CEO of Scalpel. In this role he leads a highly motivated team building AI tools to enhance patient safety across the peri-operative pathway. Scalpel provides a clinically validated surgical intelligence platform that uses computer vision to provide real-time insights into clinical workflows - starting with managing surgical instruments. Trained as a dentist, Yesh has over nine years of interdisciplinary experience in healthcare and technology (Virtual Reality, Augmented Reality, and Computer Vision). In his doctoral research, he has designed and evaluated one of the first immersive virtual reality training tools for Oral and Maxillofacial Surgery.

Pulijala has spent thousands of hours in operating rooms where he has first-hand experienced several surgeries going wrong - of which, to his surprise, nearly 50% were preventable. That significantly impacted him - sparking his mission to improve current surgical processes and prioritize patient safety. In 2017, he founded Scalpel to make surgery safer.

In the last few years, Scalpel has been on an incredible journey to engage healthcare institutions globally to align with their mission to improve patient safety in surgery. They have partnered with some of the most innovative healthcare providers and manufacturers. Today, Scalpel is shaping the future of surgery by connecting surgical data science with clinical performance, not only inside the operating rooms but across the perioperative pathway.

Stay tuned to his Expert Series so you can learn more about how to use AI in your Sterile Processing unit and streamline your operations to make surgery safer.

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