

Global Summit on **ROBOTICS AND ARTIFICIAL INTELLIGENCE**

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Artificial intelligence and robotic surgery: current perspective and future directions**Mahendra Bhandari***Vattikuti Urology Institute, USA.*

Conventional mechanical robots function by transmitting actions of the surgeon's hands to the surgical target through the tremor-filtered movements of surgical instruments. Similarly, the next iteration of surgical robots conform human-initiated actions to a personalized surgical plan leveraging 3D digital segmentation generated prior to surgery. The advancements in cloud computing, big data analytics, and artificial intelligence have led to increased research and development of intelligent robots in all walks of human life. Inspired by the successful application of deep learning, several surgical companies are joining hands with tech giants to develop intelligent surgical robots. We, hereby, highlight key steps in the handling and analysis of big data to build, define, and deploy deep-learning models for building autonomous robots. Despite tremendous growth of autonomous robotics, their entry into the operating room remains elusive. It is time that surgeons actively collaborate for the development of the next generation of intelligent robotic surgery.