Abstract: Continuous monitoring of surgical patients

Patients undergoing surgery are being carefully monitored during the entire perioperative work flow. This monitoring includes continuous vital signs and other biomedical signals. However, most of this data is only displayed on a monitor to be judged by the acting anesthesiologist at that moment or to give alarms. In this talk, I will share some experience from projects that I have with Karolinska University Hospital on collecting and using continuous vital signs data using basic signal processing, automated analysis, and machine learning. I will highlight potential applications in predicting adverse outcomes, such as hypotension, and what problems and issues that we have encountered and how we are solving them.