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# Robotic Sensing for CI Insertion

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# Robotic implant placement



(a)  
tip scraping

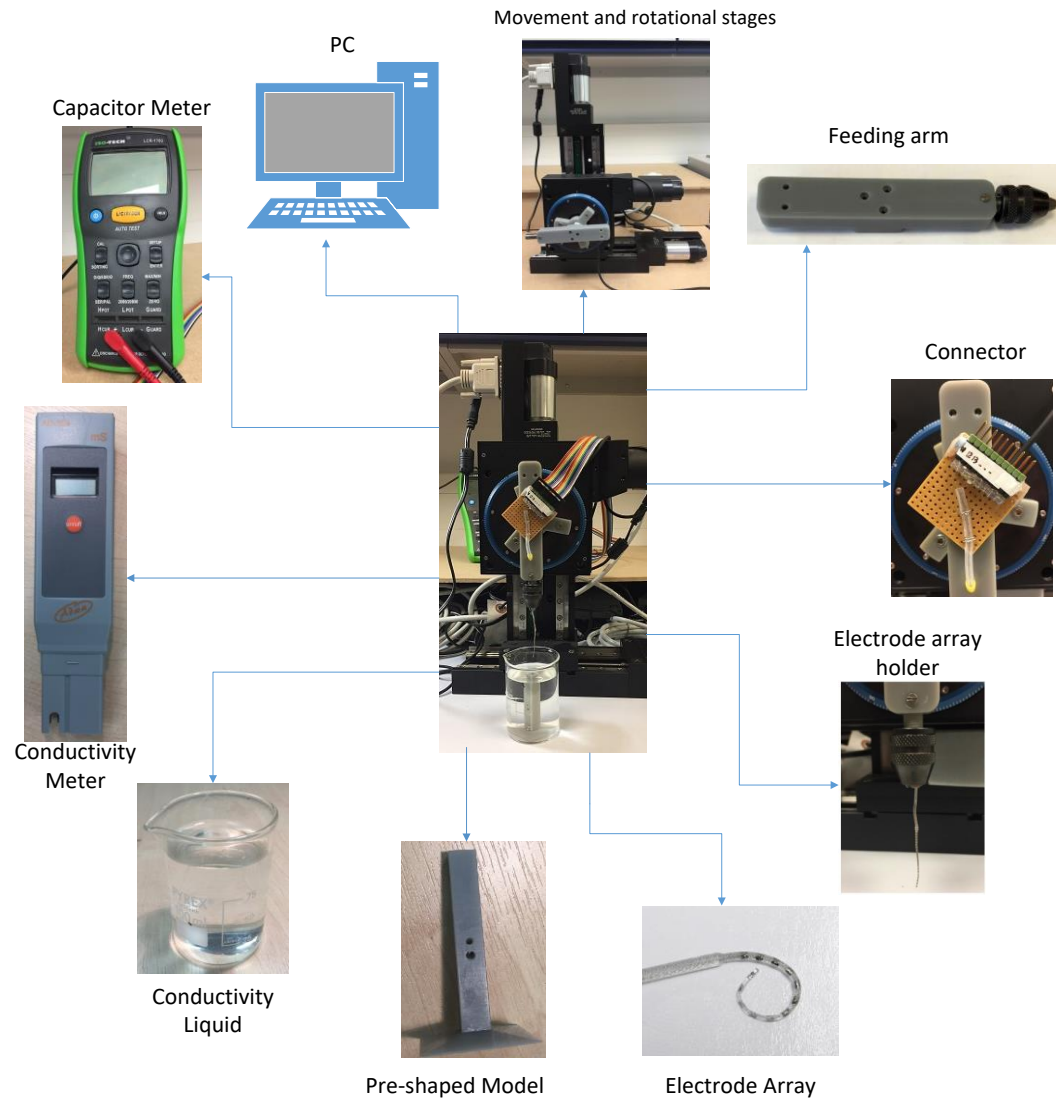


(b)  
tip fold-over



(c)  
buckling

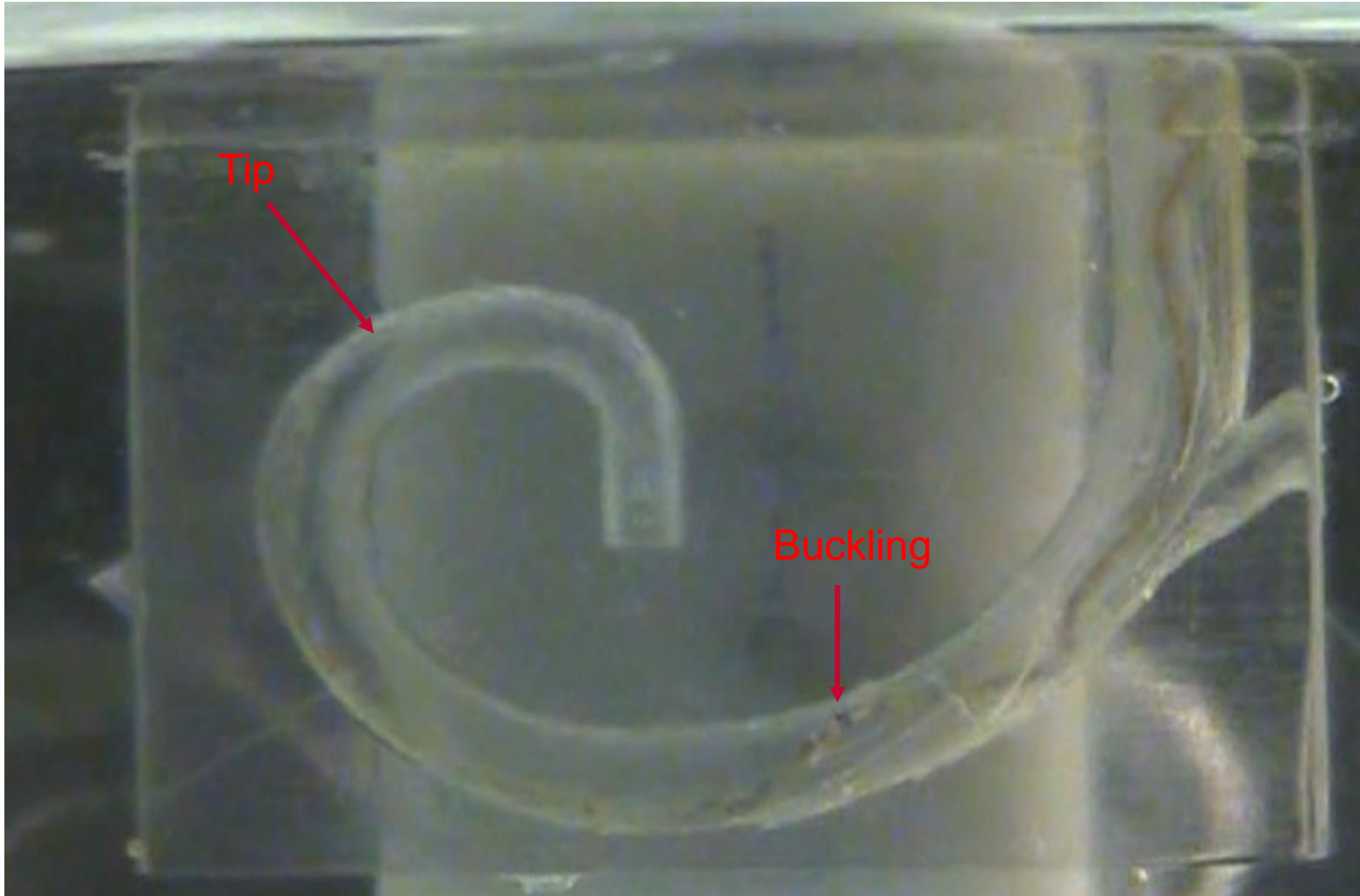
# Robotic implant placement





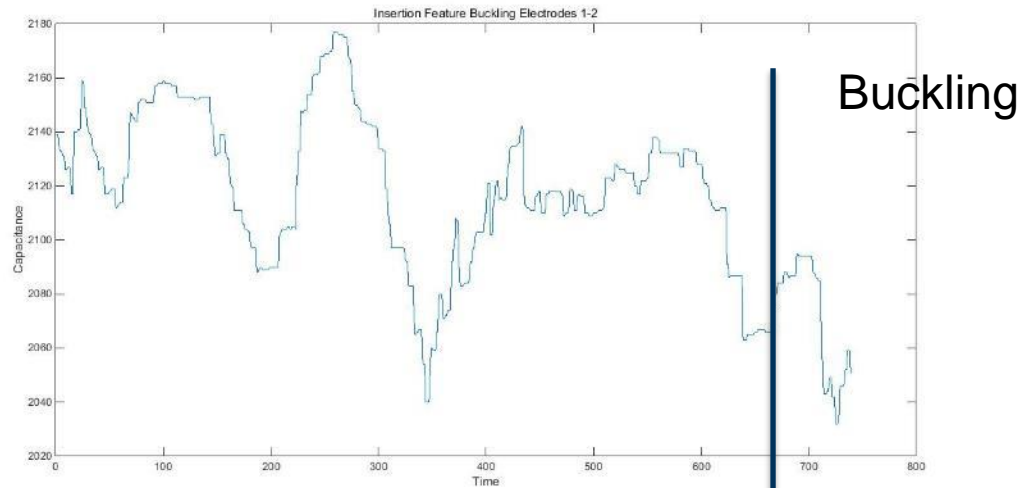
# Implant buckling

13 October 2020

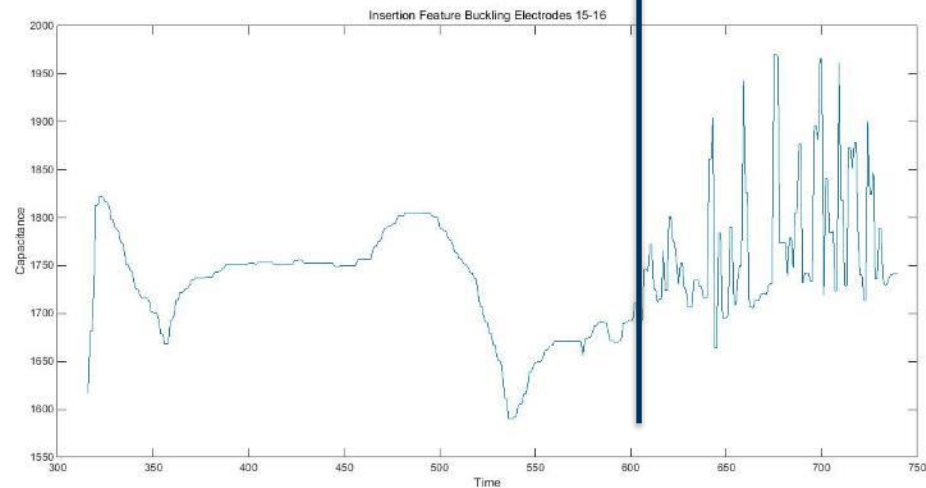


# Capacitance measurements

Tip pair of electrodes

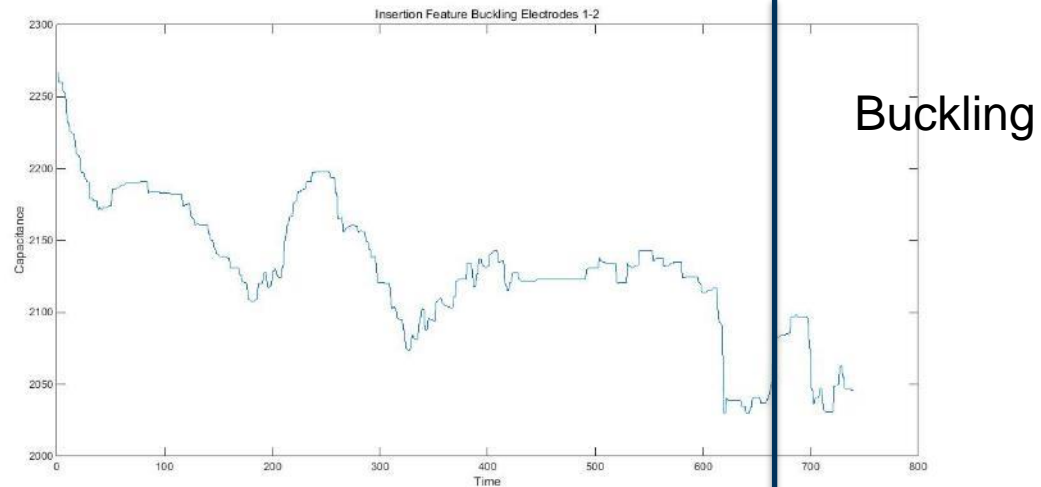


Middle pair of electrodes

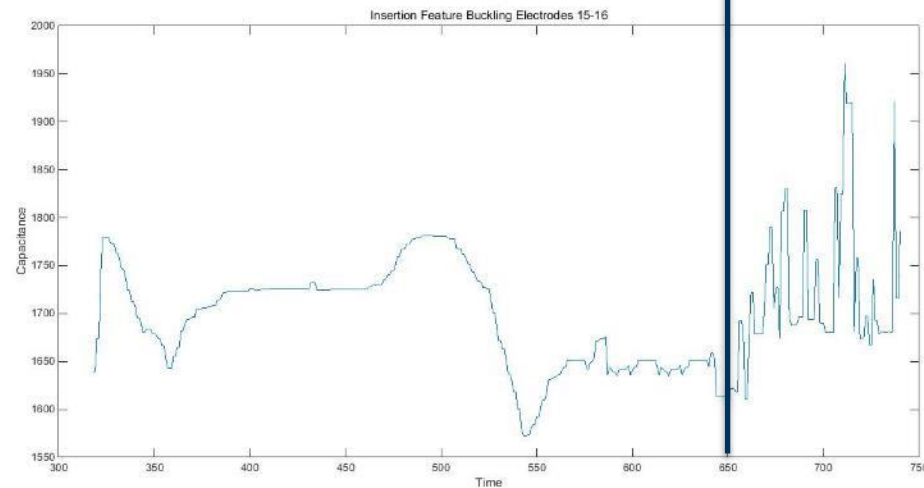


# Capacitance measurements

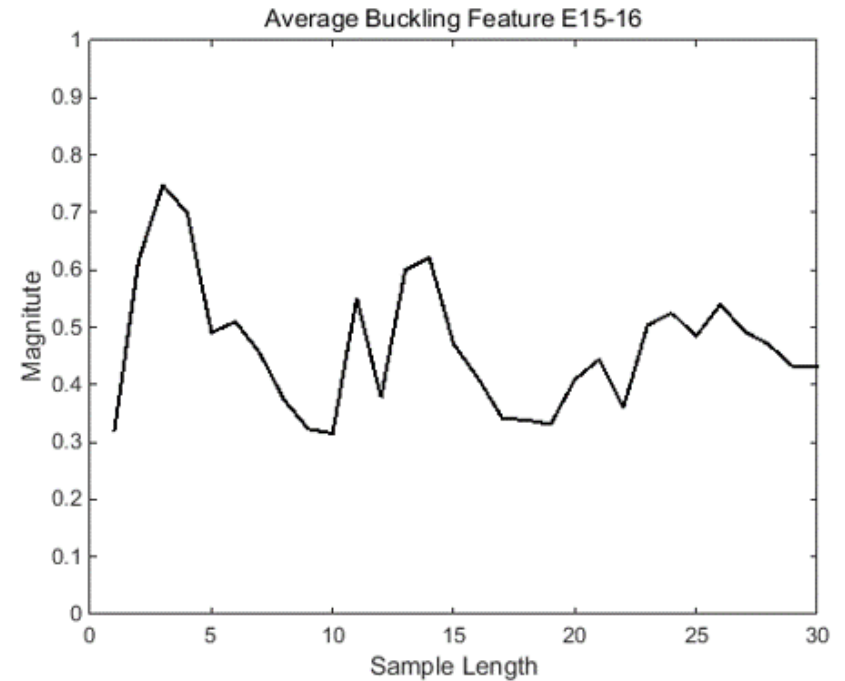
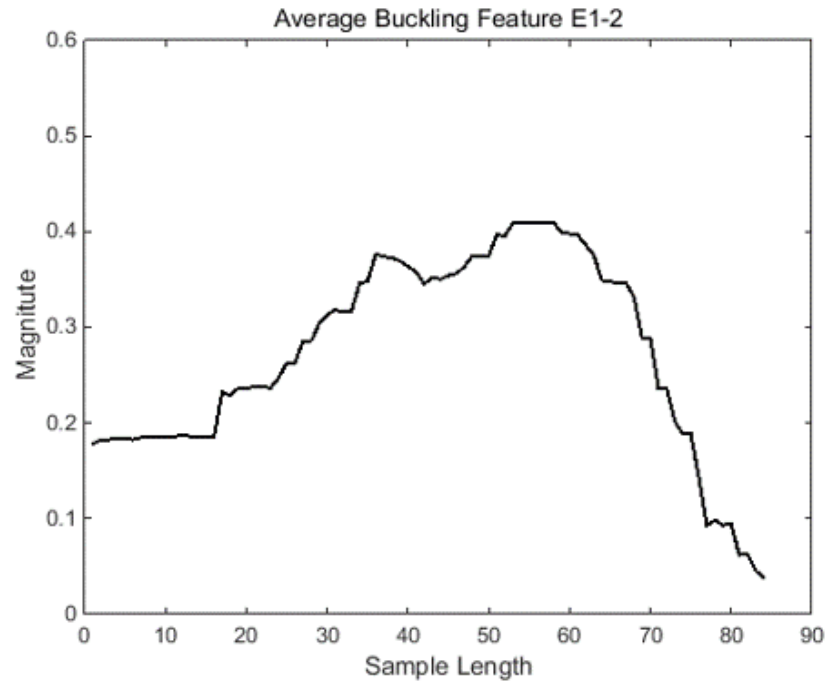
Tip pair of electrodes



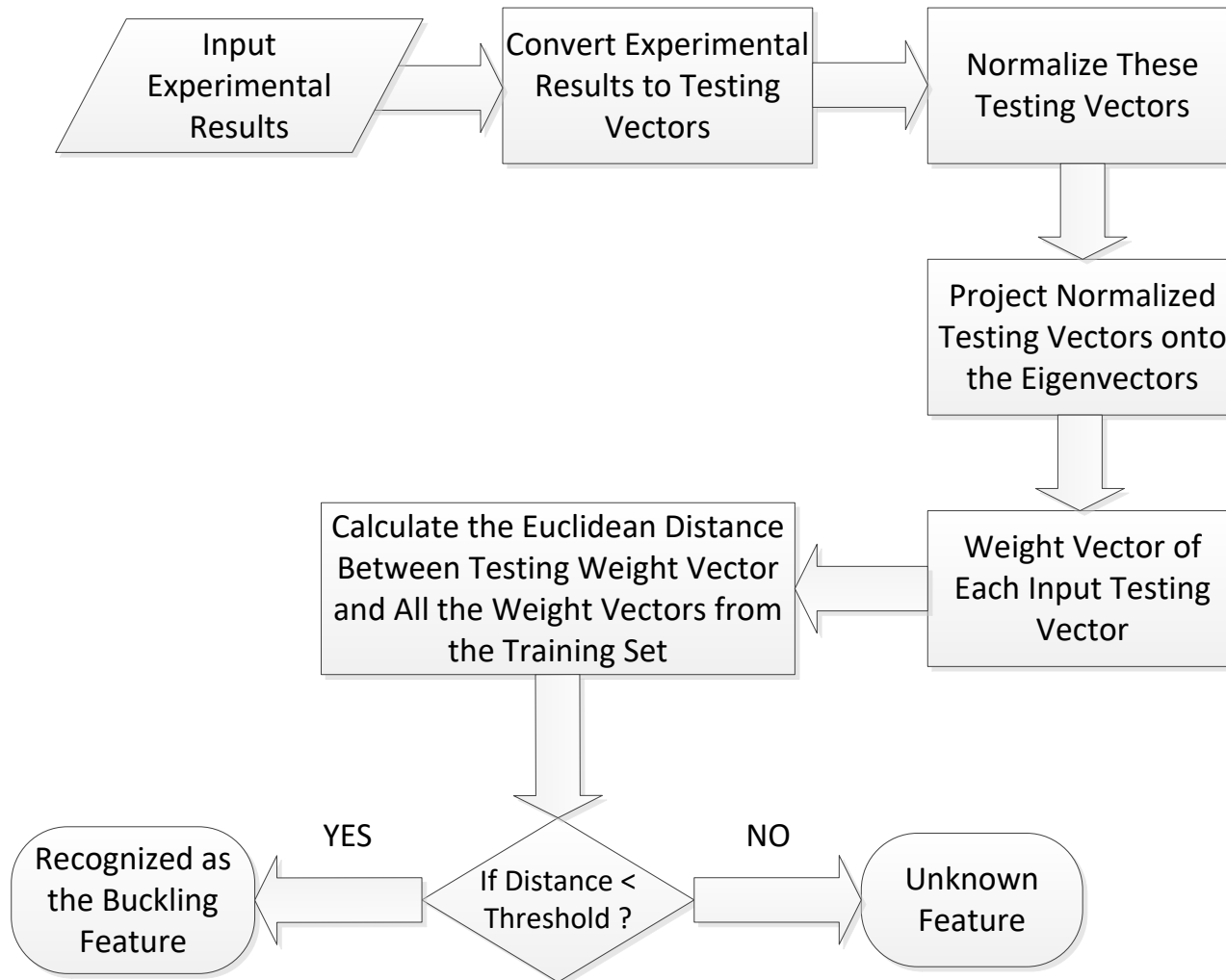
Middle pair of electrodes



# Capacitance measurements



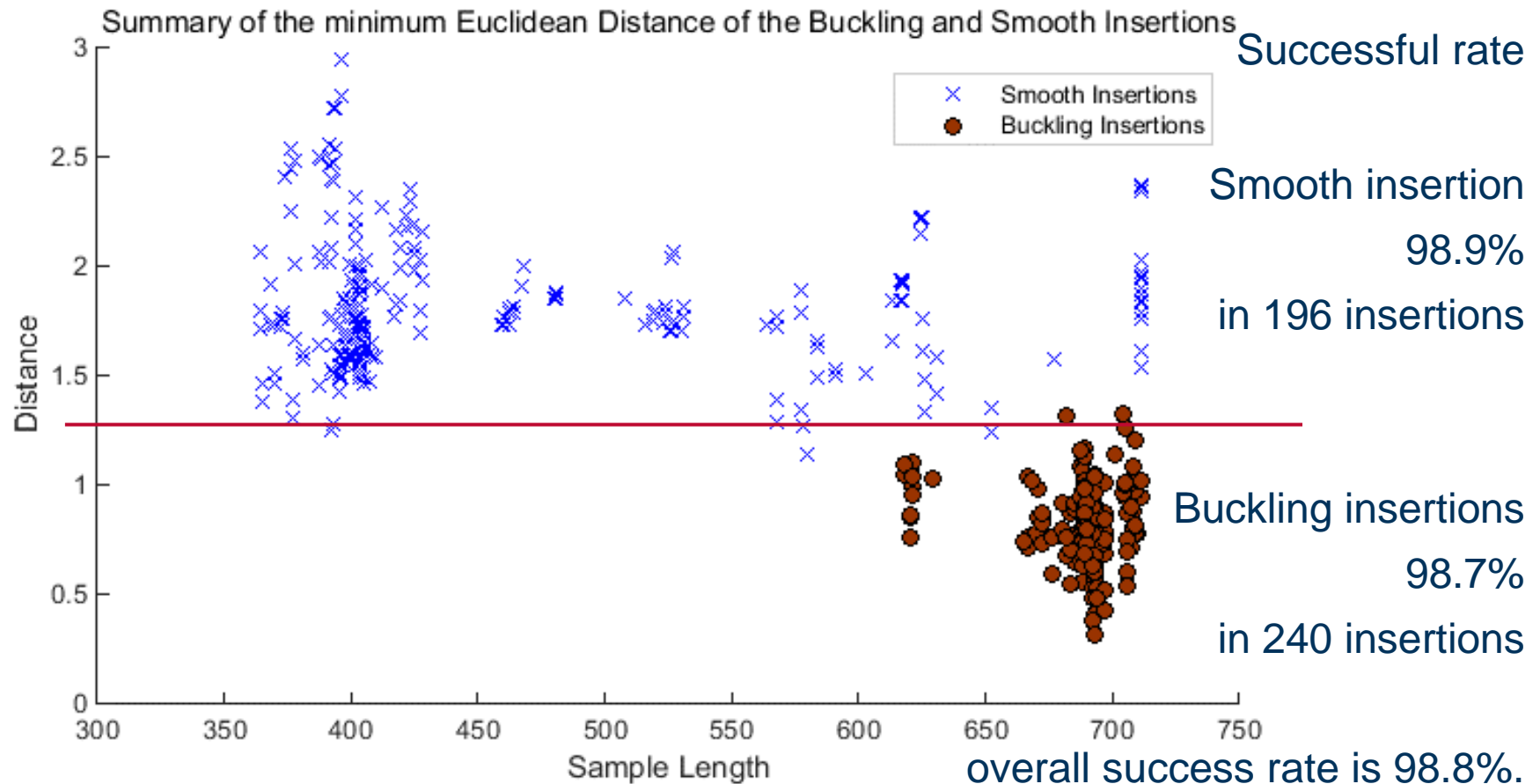
# Pattern recognition using Principal Component Analyse (PCA)





# Pattern recognition using Principal Component Analyse (PCA)

13 October 2020



**Thank you**

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