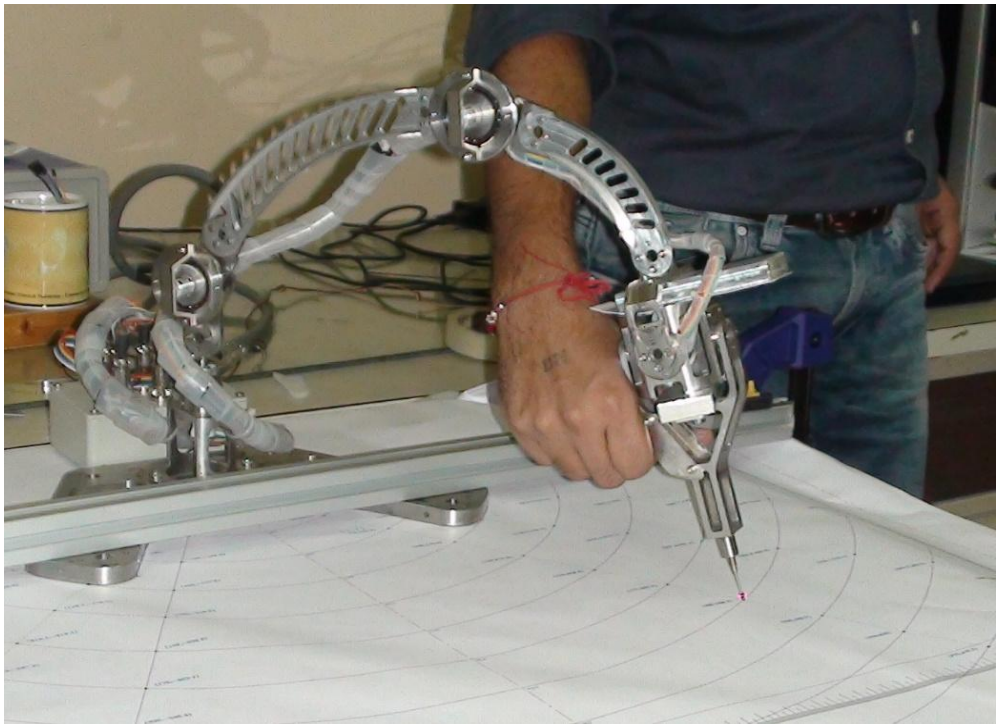
Serial Coordinate Measuring Mechanism (SCMM)

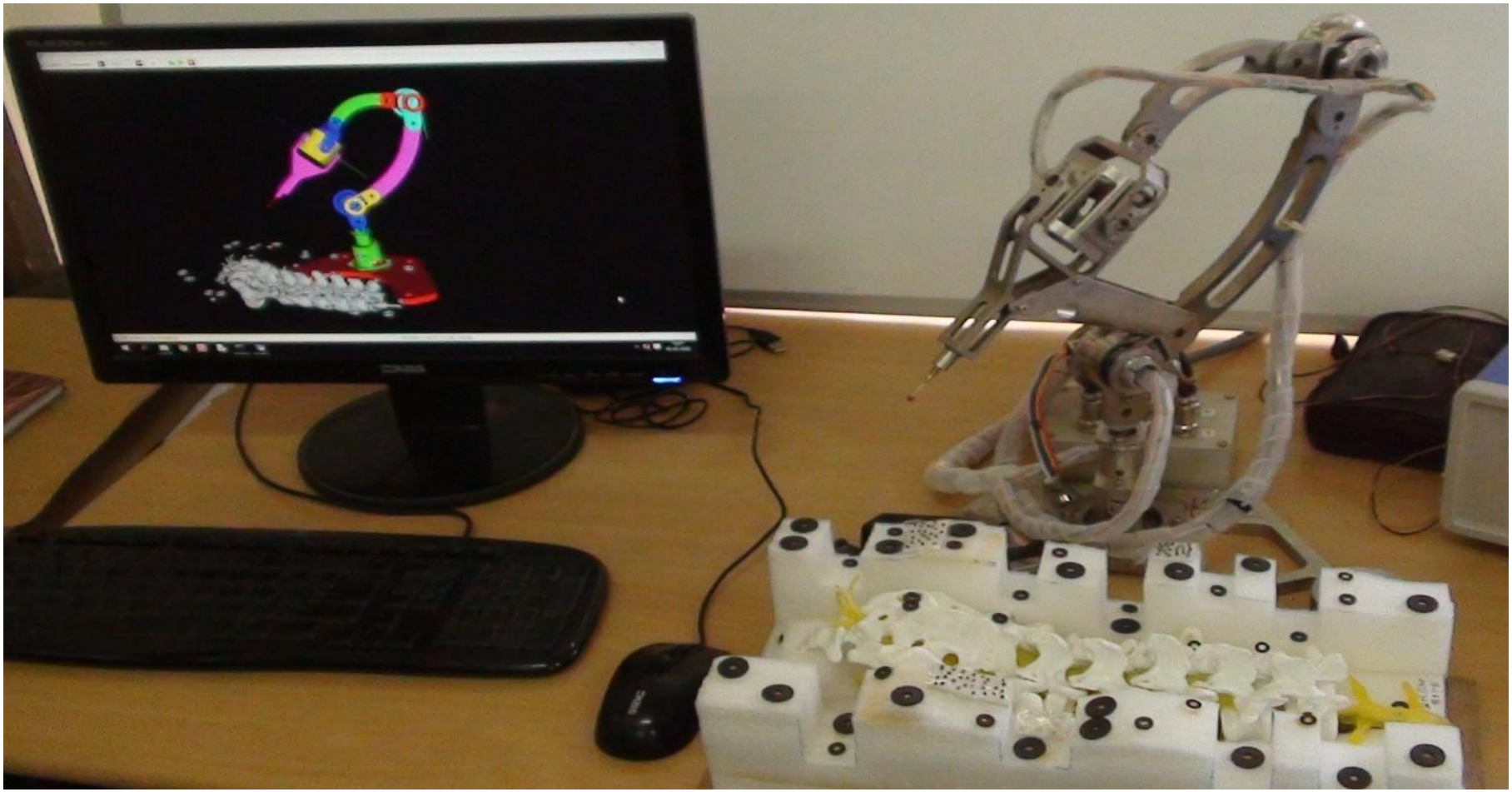
SCMM is a 5 DOF passive electromechanical device used to measure the (X-Y-Z) co-ordinates of a spatial point as well as a 3D line vector passing through the point with respect to its base coordinate system. This device can be used for patient registration in Neuro-Surgical procedures, for reverse engineering applications involving feature (surface and volume) generation from a given object and as an educational kit for enhancing imagination and visualization.

Prototype of SCMM



SCMM during calibration procedure

Neuronavigation procedure demonstrated for SCMM on a spine phantom



Guided User Interface (GUI) during running of SCMM