

### General description of the MPLCS database

D. Frolova, H. Stern, **S. Berman**, 2012. Most Probable Longest Common Subsequence for Recognition of Gesture Character Input, *IEEE Systems Man and Cybernetics, part B*, 43(3): 871-880.

The database contains three subsections according to the sections it is used in the paper. The data was recorded using a Primesense camera and Open NI tracker.

1. SectionA-NonDigitTrajectories - Contains 50 2D trajectories of non-digits. The trajectories were executed in the frontal plane and the data includes the  $[x,y]$  coordinates of the trajectories. The trajectories scaled to  $[0\ 1]$ .
2. SectionA-PreisolatedDigits - Contains two sub-directories:
  - a. Eight users (100 samples per gesture) – Eight subjects (4 male and 4 female, aged 24-35, right and left handed) participated in the experiments. Each subject executed 15-20 repetitions of each of 10 gesture digits. The repetitions were performed with pauses of a few days between the experiments. The data contains  $[X\ Y]$  coordinates of the trajectories projected onto a plane.
  - b. Two additional users (120 gestures) – Two additional subjects (one male, one female, age 30-46) participated in the experiment. Each recorded 6 samples of each of the 10 digits in one recording session. The data contains the original  $[x,y,z]$  coordinates.
3. SectionB-StreamedInput – Contains 7 digit sequences. The data contains two columns with frame numbers (the frame from tracking start and the frame from recording onset) and the  $[x,y,z]$  trajectory coordinates.