Directory Structure:

1) **Code**: contains the code.
    a) **Main_Exp_MotionCompensateFinal.m**: The main script file. Call this to perform a comparison between 3D reconstruction results by our BSC and traditional and four-step phase shifting;
    b) **Func_BinomialSelfCompemsation.m**: function of our BSC;
    c) **Func_Compute3D_SPU.m**: this function first computes absolute phase from the wrapped phase map of both left and right cameras by stereo phase unwrapping algorithm, then computes 3D point clouds;
    d) **Package**: other functions.
2) **Data**: contains calibration files and captured images:
    a) **mCamera1Rectified.mat**: calibration matrices of the main camera;
    b) **mCamera2Rectified.mat**: calibration matrices of the auxiliary camera;
    c) **mProjector.mat**: calibration matrices of the projector;
    d) **Hand**: 100 frames of captured images measuring dynamic human hand;
    e) **Statue**: 100 frames of captured images measuring dynamic gypsum statue.
3) **Videos**: contains the video corresponds to Fig. 9 in the paper:
    a) **Butterfly.mp4**: wooden butterfly model with wings flapping;
    b) **MovingStatue.mp4**: moving statue;
    c) **ScissorsStoneCloth.mp4**: hand showing scissors, stone, and cloth gestures;
    d) **WavingHand.mp4**: waving hand.

Instruction:

Call **Main_Exp_MotionCompensateFinal.m** to watch a comparison between 3D reconstruction results by our BSC and traditional and four-step phase shifting.