List of Tables

Table	*Title*	*page*
2.1	Overview of popular block matching algorithms (BMA).	15
3.1	Test video sequences used in the study.	30
3.2	Performance comparisons in terms of PSNR, SSIM, and ANCPB for slow motion sequences.	32
3.3	Performance comparisons in terms of PSNR, SSIM, and ANCPB for medium motion sequences.	32
3.4	Performance comparisons in terms of PSNR, SSIM, and ANCPB for fast motion sequences.	33
3.5	Performance comparisons in terms of PSNR, SSIM, and ANCPB for directional motion sequences.	33
4.1	Surveillance test sequences used in the study.	51
4.2	PSNR and motion search complexity (ANCPB) comparisons for different components of proposed method. The full version of proposed method contains all three components: 3-class block classification (BC), class-based search strategy (SS), and block partitioning (BP).	58
4.3	PSNR and motion search complexity (ANCPB) comparisons for different traditional and surveillance-based block matching algorithms.	58
5.1	Test skeleton sequences used in the study.	77
5.2	Bits per skeleton points and Bit-savings for different prediction modes (EGC is used to encode all residuals and the bits for coding side information are excluded).	81
5.3	Statistics of bits per body joint and bit-savings for different entropy coding schemes (the adaptive multimodal prediction method is used as the prediction mode).	83
5.4	Bits per skeleton points and Bit-savings for different prediction modes and different entropy coding schemes. (The bits for coding side information are excluded)	83
5.5	Skeleton side information coding performance comparison for different methods (in bits per skeleton joint and bit savings).	84
5.6	Statistics of bits per joint & bit-savings for different frame skip scenarios on Posetrack & Surveillance datasets.	86
5.7	Statistics of bits per joint & bit-savings for skeletons estimated [Xiu *et al.*, 2018] on Posetrack & Surveillance datasets.	86
5.8	Statistics of bits per joint & bit-savings for different Gaussian noise levels on Posetrack & Surveillance datasets.	86