For year 2001-2005:
Top 20 most frequent patterns with length 1

⟨data⟩ :1231   ⟨information⟩ :418   ⟨efficient⟩ :289   ⟨queries⟩ :226
⟨based⟩ :764   ⟨xml⟩ :383   ⟨approach⟩ :276   ⟨systems⟩ :225
⟨mining⟩ :665   ⟨retrieval⟩ :316   ⟨classification⟩ :264
⟨using⟩ :607   ⟨search⟩ :314   ⟨system⟩ :243
⟨web⟩ :591   ⟨query⟩ :313   ⟨database⟩ :238
⟨learning⟩ :521   ⟨clustering⟩ :307   ⟨model⟩ :231

Top 20 most frequent patterns with length 2

⟨mining data⟩ :297   ⟨web data⟩ :74   ⟨association mining⟩ :55
⟨based data⟩ :105   ⟨web mining⟩ :74   ⟨learning data⟩ :54
⟨streams data⟩ :95   ⟨management data⟩ :72   ⟨efficient data⟩ :53
⟨using data⟩ :88   ⟨web based⟩ :70   ⟨model based⟩ :53
⟨clustering data⟩ :82   ⟨frequent mining⟩ :67   ⟨dimensional data⟩ :51
⟨xml data⟩ :82   ⟨patterns mining⟩ :62   ⟨learning based⟩ :50
⟨clustering based⟩ :75   ⟨approach based⟩ :58

Top 20 most frequent patterns with length 3

⟨asia mining data⟩ :6   ⟨cliques data mining⟩ :2   ⟨ssp mining data⟩ :2
⟨mdm mining data⟩ :6   ⟨drifting mining data⟩ :2   ⟨ugly mining data⟩ :2
⟨pacific mining data⟩ :6   ⟨fractals mining data⟩ :2   ⟨warehouse based data⟩ :2
⟨dm mining data⟩ :3   ⟨grids mining data⟩ :2   ⟨7th data mining⟩ :1
⟨pakdd mining data⟩ :3   ⟨medicine mining data⟩ :2   ⟨aaand mining using⟩ :1
⟨academy mining data⟩ :2   ⟨ole mining data⟩ :2   ⟨aboutness using based⟩ :1
⟨bad mining data⟩ :2   ⟨peculiarity data mining⟩ :2

Top 20 most frequent patterns with length 4

⟨adherence using based data⟩ :1   ⟨ids mining based data⟩ :1
⟨admit mining based data⟩ :1   ⟨infer mining using data⟩ :1
⟨bibfinder mining using data⟩ :1   ⟨lead mining using data⟩ :1
⟨columbia mining based data⟩ :1   ⟨meningitis mining using data⟩ :1
⟨cooperatively mining using data⟩ :1   ⟨rs mining using data⟩ :1
⟨deployment mining based data⟩ :1   ⟨rsbr mining using data⟩ :1
⟨divisive mining using data⟩ :1   ⟨simplicial mining using data⟩ :1
⟨effectively mining using data⟩ :1   ⟨statminer mining using data⟩ :1
⟨gdt mining using data⟩ :1   ⟨ubdm mining based data⟩ :1
⟨generalised mining using data⟩ :1
⟨ibl mining using data⟩ :1

For year 2008-2012:
Top 20 most frequent patterns with length 1

⟨data⟩ :1856	⟨information⟩ :637	⟨efficient⟩ :511	⟨multi⟩ :474
⟨based⟩ :1783	⟨analysis⟩ :617	⟨clustering⟩ :505	⟨time⟩ :386
⟨using⟩ :1129	⟨web⟩ :596	⟨retrieval⟩ :493	
⟨learning⟩ :1099	⟨system⟩ :569	⟨model⟩ :484	
⟨mining⟩ :1004	⟨classification⟩ :546	⟨networks⟩ :480	
⟨search⟩ :738	⟨query⟩ :542	⟨approach⟩ :474	

Top 20 most frequent patterns with length 2

⟨mining data⟩ :421	⟨machine learning⟩ :123	⟨learning based⟩ :108
⟨data based⟩ :179	⟨clustering based⟩ :119	⟨research based⟩ :100
⟨system based⟩ :152	⟨using based⟩ :117	⟨analysis based⟩ :95
⟨model based⟩ :136	⟨learning using⟩ :115	⟨learning data⟩ :94
⟨streams data⟩ :127	⟨algorithm based⟩ :113	⟨multi learning⟩ :94
⟨using data⟩ :127	⟨mining based⟩ :111	⟨management data⟩ :93
⟨approach based⟩ :123	⟨analysis data⟩ :110	

Top 20 most frequent patterns with length 3

⟨warehouses based data⟩ :3	⟨albatross using data⟩ :1
⟨modis using data⟩ :2	⟨ale using based⟩ :1
⟨pathway data based⟩ :2	⟨alias learning based⟩ :1
⟨abnormalities learning data⟩ :1	⟨allow based data⟩ :1
⟨abnormalities learning using⟩ :1	⟨alphabets based using⟩ :1
⟨abnormalities using data⟩ :1	⟨alpos learning data⟩ :1
⟨abundant learning based⟩ :1	⟨american learning using⟩ :1
⟨accents learning using⟩ :1	⟨analyst data based⟩ :1
⟨aco using based⟩ :1	⟨ancheng data based⟩ :1
⟨adverse using data⟩ :1	
⟨affected using data⟩ :1	

Top 20 most frequent patterns with length 4

⟨abnormalities learning using data⟩ :1	⟨remaining using data based⟩ :1
⟨bee using data based⟩ :1	⟨reverible learning using data⟩ :1
⟨ciphertext using data based⟩ :1	⟨rotation learning data based⟩ :1
⟨comet learning using data⟩ :1	⟨sigma using data based⟩ :1
⟨froc learning using data⟩ :1	⟨subdivision learning data based⟩ :1
⟨hazards using data based⟩ :1	⟨tailed using data based⟩ :1
⟨homogenous learning using data⟩ :1	⟨topographic learning using data⟩ :1
⟨pathway using data based⟩ :1	⟨vibratory using data based⟩ :1
⟨periodical learning data based⟩ :1	
⟨recipe learning using data⟩ :1	