Table 2 Examples of Pattern Recognition Applications

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| **Problem Domain** | **Application** | **Input Pattern** | **Pattern Class** |
| Bioinformatics | Sequence Analysis | DNA/Protein sequence | Known type of  genes/pattems |
| Data mining | Searching for  meaningful patterns | Points in multi  dimension space | Compact and well  separated clusters |
| Document  classification | Internet search | Text document | Semantic categories |
| Document image  analysis | Reading machine for  the blind | Document image | Alphanumeric  characters / words |
| Industrial automation | Printed circuit board  inspection | Intensity or range  image | Defective / non  defective nature of  product |
| Multimedia database  retrieval | Internet search | Video clip | Video genres e.g.  action. dialogue etc |
| Biometric recognition | Personal  identification | Face. iris & finger  print | Authorized user for  access control |
| Remote sensing | Forecasting crop  yield | Multispectral image | Land use categories.  growth pattern of  crops |
| Speech recognition | Telephone  directory enquiry  with operator | Speech waveform | Spoken words |