**Topic**

**Pattern Recognition** is the area that studies the operation and design of systems that recognize patterns in data such as discriminant analysis, feature extraction, error estimation, cluster analysis (together sometimes called statistical pattern recognition), grammatical inference and parsing (sometimes called syntactical pattern recognition). Other important application areas are image analysis, character recognition, speech analysis, man and machine diagnostics, person identification and industrial inspection.

I'll be researching systems based on statistical analysis and neural networks designed to recognize patterns such as facial, optical, audio, email and voice. In addition, I'll be discussing companies that are researching and developing products and why businesses are interested in this.