



**iGP: Smart City**

**iGP Module: Speaker Recognition**

**Lead Supervisor: Dr. Hassan Mostafa, Dr. Yasmin Fahmy**

### **Value Proposition**

- Remote user authentication
- Speech Data Management: In voice mail browsing or intelligent answering machines, use speaker recognition to label incoming voice mail with speaker name for browsing and/or action (personal reply).
- Personalization: In voice-web or device customization, store and retrieve personal setting/preferences based on user verification for multi-user site or device (car climate and radio settings).
- Crowd Control (Public Behaviour Change) after successfully identifying noisy people.

### **Targeted Customer Segment**

- Any entity require user identification like Banks.
- Smart devices integrity to provide a personalization and management services.
- Companies, need to control their employees.

### **Key Activities**

Speaker recognition (Identification) is a pattern recognition problem. We have to select among various technologies used to process and store voice prints like frequency estimation, hidden Markov models, Gaussian mixture models, pattern matching algorithms, neural networks, matrix representation, Vector Quantization and decision trees.

### **Key Resources Required**

Java, Php, Rubby, C#, Python developers.