

A decorative graphic on the left side of the slide, consisting of a network of light blue lines and small circles, resembling a circuit board or a neural network diagram.

# AN EFFICIENT PRIVACY PRESERVING RELEVANCE KEYWORD SEARCH METHOD

# MOTIVATION

- As we step into the big data era, terabyte of data are produced world-wide per day. Enterprises and users who own a large amount of data usually choose to outsource their precious data to cloud facility in order to reduce data management cost and storage facility spending. As a result, data volume in cloud storage facilities is experiencing a dramatic increase
- These large connection of data are stored in an encrypted form and are classified under different categories.
- An efficient search algorithm is needed to provide the user with the accurate and useful search results when they want to access some file on the cloud or any system.

# BASIC CONCEPTS

- **Searching algorithm:** any algorithm which solves the search problem, namely, to retrieve information stored within some data structure, or calculated in the search space of a problem domain. The appropriate search algorithm often depends on the data structure being searched, and may also include prior knowledge about the data.
- **Data Encryption and Decryption:** Encryption is the process of translating plain text data into something that appears to be random and meaningless. Decryption is the process of converting ciphertext back to plaintext.

# OBJECTIVE

- The objective of our project is to design a search functionality algorithm which takes the keywords of the document name as input and then searches the file from a large collection of data files on a server.
- The algorithm needs to find the files which contain the keywords given as input and display the list of the files that match the user search criteria.
- New files added to the collection are saved under relevant category along with a file containing the tags which represents the content of the file.
- An encryption algorithm also needs to be implemented in order to provide security for the data files.