

$$\begin{array}{l} X \\ P \\ 100 \\ 1000 \\ 1000000 \\ 0,1 \\ 1000 \\ 0,1 \\ 1000 \\ 0,1 \\ X \end{array}$$

$$\begin{array}{l} \{0,1\} \\ A(x) = \\ \{1 \mid x \notin A \\ \{0 \mid x \in A. \\ \{0,1\} \end{array}$$

$$\begin{array}{l} 0,1 \\ x \\ X \\ 0,1 \end{array}$$

$$\begin{array}{l} \mu_A(x) \\ \tilde{A} \\ \mu_{\tilde{A}}(x) : \end{array}$$

$$\begin{array}{l} X \rightarrow \\ [0,1] \\ X = \\ [0,1200] \\ X \end{array}$$

$$\begin{array}{l} 1000 \\ \mu_{\tilde{B}}(x) = \\ \left\{ \begin{array}{l} x-800 \mid 200 \leq x \leq 1000 \\ 1200-x \mid 200 \leq x < 1200 \end{array} \right. \end{array}$$

$$\begin{array}{l} \tilde{B} \\ ?? \\ ?? \\ 1000 \\ ?? \end{array}$$

$$A = \{(x, \mu_{\tilde{A}}(x)) : x \in X\}$$

$$\begin{array}{l} X \\ \{x_1, x_2, \cdots, x_n\} \end{array}$$

$$\begin{array}{l} A \\ \tilde{A} \\ A = \\ \left\{ \mu_{\tilde{A}}(x_1)x_1, \mu_{\tilde{A}}(x_2)x_2, \cdots, \mu_{\tilde{A}}(x_n)x_n \right\} \end{array}$$

$$\begin{array}{l} A \\ \mu_{\tilde{A}}(x) = 0, \quad \forall x \in X \end{array}$$

$$\begin{array}{l} A \\ \mu_{\tilde{A}}(x) = 1, \quad \forall x \in X \end{array}$$

$$\begin{array}{l} A \\ B \\ A \subseteq \end{array}$$

$$\begin{array}{l} \tilde{B} \\ \mu_{\tilde{A}}(x) \leq \\ \mu_{\tilde{B}}(x), \quad \forall x \in \end{array}$$

$$\begin{array}{l} X \\ (0) \\ A \cong \end{array}$$

$$\begin{array}{l} B \\ \mu_{\tilde{A}}(x) = \\ \mu_{\tilde{B}}(x), \quad \forall x \in \\ X \end{array}$$

$$\begin{array}{l} \mu_{\tilde{A}^c}(x) = 1 - \mu_{\tilde{A}}(x), \quad \forall x \in X \\ \mu_{\tilde{A} \cup \tilde{B}}(x) = \max(\mu_{\tilde{A}}(x), \mu_{\tilde{B}}(x)), \quad \forall x \in X \\ \mu_{\tilde{A} \cap \tilde{B}}(x) = \min(\mu_{\tilde{A}}(x), \mu_{\tilde{B}}(x)), \quad \forall x \in X \end{array}$$

$$\begin{array}{l} \alpha \\ X \\ A \\ \alpha \\ [0,1] \\ \alpha \\ A \\ \alpha \\ A \\ A[\alpha] \\ A[\alpha] \\ A[\alpha] = \{x \in X : \mu_{\tilde{A}}(x) \geq \alpha\} \end{array}$$

$$\begin{array}{l} (1) \\ \tilde{A}[0] = \\ \{x \in \end{array}$$