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Popular RSLs (e. g. XCS, XCSF, UCS, BioHEL, …) build
discriminative function models of the form

$$\hat{f}_{\mathcal{M}}(\theta, x) = \sum_{k=1}^{K} \quad m_k(x) \quad \gamma_k \quad \hat{f}_k(\theta_k, x) \tag{1}$$

where $\theta = \left\{ \{\theta_k\}_{k=1}^{K}, \{\gamma_k\}_{k=1}^{K} \right\}$ and $\mathcal{M} = \left\{ K, \{m_k\}_{k=1}^{K} \right\}$.

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model structure

responsibility

mixing weight

submodel

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