$$\text{Sample} \xrightarrow[\text{of features}]{\text{extraction}} x = \left\{ \begin{array}{c} (x_{1,1}, \ldots, x_{1,d}) \\ (x_{2,1}, \ldots, x_{2,d}) \\ \vdots \\ (x_{b,1}, \ldots, x_{b,d}) \end{array} \right\} \xrightarrow{\text{classification}} y = \begin{cases} +1 \\ -1 \end{cases}$$