**Abstract:** Nearest neighbor classification expects the class conditional probabilities to be locally constant. The assumption becomes invalid in high dimension due to the curse-of-dimensionality. Severe bias can be introduced under this condition when using nearest neighbor rule. We propose an adaptive nearest neighbor classification method “indecisive classifier” to minimize bias and variance by avoiding decision making in some hard-decision region. As a result, better classification performance can be expected in some scenario such as video based face recognition.