In this talk, we first present the generalized representer theorem in Banach spaces for generalized data. Based on the generalized representer theorem, we solve the nonconvex support vector machines in reproducing kernel Hilbert spaces by alternating direction multiplier methods. Next, we use the Kurdyka-Lojasiewicz inequality to prove the global convergence of the iterative solutions given by the nonconvex loss functions. Finally, we show the numerical examples of the simulated data and the real data.