MULTI-OUTPUT SUPPORT VECTOR REGRESSION FOR TIME SERIES PREDICTION

Support vector machines have been used extensively by both practitioners and academics for time series prediction (in the formulation of support vector regression (SVR)) over the last decade. Due to its inherent modeling structure with only single output, however, the standard SVR cannot deal with multi-output modeling tasks such as multi-step-ahead prediction and interval-valued prediction to depict the dependency or sequential (ordinary) dynamics among output variables. In this talk, I will present our recent research progress on the applications of multi-output SVR for multi-step-ahead prediction and interval-valued prediction.