

## ABSTRACT

One of the major problems plaguing the Thailand capital city, Bangkok, is flooding during the rainy season, which is determined by two primary factors: local rainfall and water level in Chaophraya River. This project proposal is an attempt to develop a system to predict the water level in Chaophraya River, based on readings of the water level up-river and downstream as well. Traditional statistical and Bayesian network modeling techniques are used to construct models from daily water level data spanning a period of five years. Some preliminary work has been done and will be discussed in this proposal.

