Title:
Real Time Implementation Fuzzy Neural Networks Methods for Prediction Pseudo Range Correction

Journal:

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Abstract:
This study applied Fuzzy Neural Network (FNN) model to predict Pseudo-range Corrections (PRC) that is important for Real Time Differential Global Positioning System (RTDGPS) accuracy. Online training for real-time prediction of the PRC enhances the continuity of service on the differential correction signals and therefore improves the positioning accuracy. With a given set of data, the fuzzy neural networks (FNN) can online predict the PRC precisely when the PRC signal is lost for a short period of time. The experiments show that the prediction total RMS errors are less than \(0.32\) meter.

Keywords:
RTDGPS-FNN- PRC- Prediction-RTCM

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