**Large-scale Sensor Performance Evaluation**

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Data quality assurance is a critical job before any data-driven research. This project will focus on detecting sensor errors and evaluating sensor performance in order to make sure a high quality data collection. Large-scale radar sensor with high-resolution data will be studied.

There are several methods available for this project. Empirical threshold filter and traffic flow theory model could be utilized to make the reality check. Fast Fourier transform or empirical mode decomposition could be employed to eliminate sensor noise.

This project will use 1 month data collected by over 1,000 directional Wavetronix sensors to assess their performance. The target month is preliminary set to be December 2016, in which there were 14.8G data.