1163-62-720   **Venkateswara Rao Mudunuru*** (`vmudunur@mail.usf.edu`), 4202 E. Fowler Ave, CMC 342, Tampa, FL 33620. *Fast Forest Quantile Regression Approach in Predicting Breast Cancer Tumor Sizes.*

When dealing with large datasets, random forest regression provides robust and powerful models with an accurate approximation of the conditional mean of the output variable. On the contrary, quantile random forest regression models provide a way to estimate conditional quantiles for the output variables. A fast forest quantile regression (FFQR) is a new and powerful machine learning model which improves the prediction accuracy of the models. This paper presents a comparison of traditional regression models and quantile regression and fast forest quantile regression models applied to breast cancer data in predicting the tumor sizes. (Received September 11, 2020)