

1067-Z1-503

**William W Miles\*** (wmiles@stetson.edu), Unit 8332, DeLand, FL 32723, and **Lisa O Coulter** and **Gary Fowks**. *ACCUV COLLEGE FOOTBALL RANKING MODEL*.

This work extends the work of Coleman which provides a football rankings system that minimizes game score violations. The modified model, called *AccuV*, developed in this paper incorporates several other aspects of most rankings systems including: strength of schedule, margin of victory, and home field advantage. These other components of a team's rank are included via an additional variable called the composite index. In addition to these new components, other bounding constraints have been added. These new constraints significantly reduce the solve-time of the model. The model of Coleman achieved a minimum of 55 game score violations for the complete 2002 season in about 36 seconds with 234,313 iterations as reported by LINGO. However, with the addition of the new constraints, the new model (without the additional ranking components) established the same minimum in only 6 seconds with a total of 55,119 iterations. This work is also easily extendable to allow the addition of other components if desired. (Received September 07, 2010)