

Ranking College Football Teams: A Customizable Quadratic Assignment Approach

SEMINAR SESSION INFORMATION

DATE: Wednesday, October 19th

TIME: 12:15pm

LOCATION: Whittemore 542

PROVIDED: Pizza and Soda

SPEAKER INFORMATION

Dr. C. Richard Cassady
Professor
Department of Industrial
Engineering University of
Arkansas

MEMBERSHIP INFORMATION

Fees are as follows and include all weekly seminars (22+) & workshops.

FIRST MEETING: FREE

MEETING: \$5

SEMESTER: \$25

YEAR: \$40

College football is big business. With tens of millions of dollars on the table and only four universities receiving an invitation to the College Football Playoff, it is more important than ever that decision-makers involved in the College Football Playoff have access to a fair approach to ranking college football teams. Because there is no such thing as an unbiased method for ranking college football teams, we provide decision-makers with a strategy for quantifying their biases. We then use a quadratic assignment problem to apply these biases fairly across all teams. Because of the size of the quadratic assignment problem, we apply a two-stage heuristic to solve the quadratic assignment problem. However, we are apply to provide evidence that the existence of a solution better than the one produced by our heuristic is incredibly unlikely.

Dr. Cassady will also provide some career advice and perspective based on his experiences in the twenty years since he completed his PhD in ISE at Virginia Tech.