

$O$  = Average Opponent's Win Percentage

$O_2$  = Average of Opponent's Win Percentage for each Opponent

$M_v$  = Average Margin of Victory

$$(1) \text{ Initial Ranking Score} = M_v \frac{2O + O_2}{3}$$

$\mathbf{T} = \{t \mid t \in \text{FBS}\}$  : Set of All FBS Teams

$\mathbf{G} = \{g_t \mid t \in \mathbf{T}\}$  : the number of games for each FBS team

$\mathbf{M} = \{[m_{t,1}, m_{t,2}, \dots, m_{t,g_t}] \mid t \in \mathbf{T}\}$  : Margin of victory for each game for team  $t$

$\mathbf{R} = \{[r_{t,0}, r_{t,1}, \dots, r_{t,g_t}] \mid t \in \mathbf{T}, r_{t,0} = \text{Ranking for team } t\}$

: the rankings for every FBS team and their opponents

(2)

$g(t \in \mathbf{T}, 1 \leq i \leq g_t)$  : Opponent difficulty scaling function  $g(t, i) = \left( \frac{m_{t,i}}{|m_{t,i}|} \right) \left( \frac{r_{t,0} - r_{t,i}}{|\mathbf{T}|} \right)$

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$$(3) \Gamma(t \in \mathbf{T}) = \sum_{i=1}^{g_t} m_{t,i} \cdot 3 \left( \frac{m_{t,i}}{|m_{t,i}|} \cdot \frac{r_{t,0} - r_{t,i}}{n} \right)$$