Incorporating Pre-Game Rankings to Colley, Massey, and Elo Methods

Joy L.
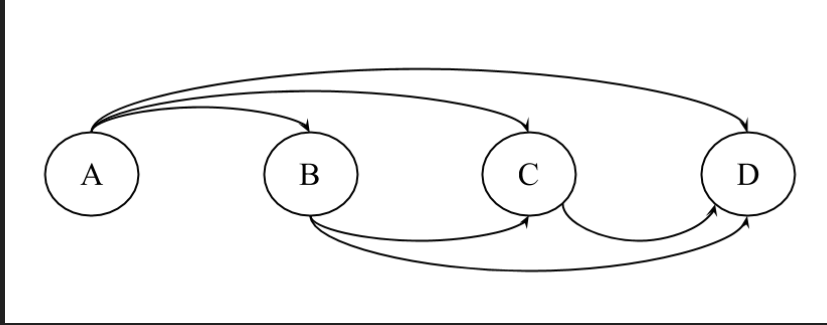
General Idea
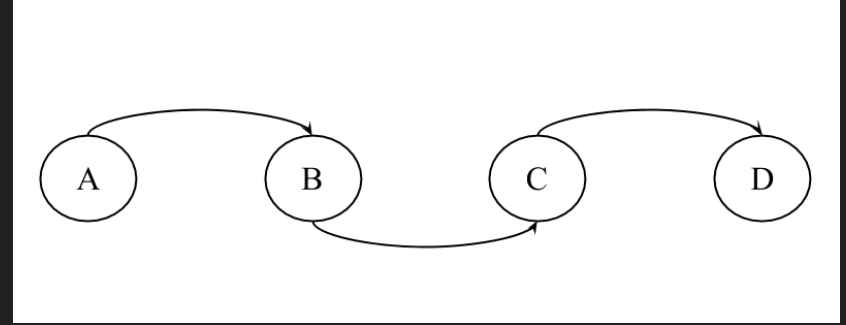
The Method

Dominance and Weak Dominance Graph

Dominance Graph

Weak Dominance Graph

Rank Weighting

The Data

736408	20160320	1	0	1	2	0	0
736408	20160320	1	0	1	3	0	0
736408	20160320	1	0	1	4	0	0
736408	20160320	1	0	1	5	0	0
736408	20160320	1	0	1	6	0	0
736408	20160320	1	0	1	7	0	0
736408	20160320	1	0	1	8	0	0
736408	20160320	1	0	1	9	0	0
736408	20160320	1	0	1	10	0	0

Dell Technologies Match Play

- Games of 2015 & 2016
- Official World Ranking

Index	Player
1	Jordan Spieth
2	Jason Day
3	Rory McIlroy
4	Bubba Watson
5	Rickie Fowler
6	Adam Scott
7	Justin Rose
8	Dustin Johnson
9	Patrick Reed
10	Danny Willett

Player indexes and names

736408	20160320	1	0	1	2	0	0
736408	20160320	1	0	1	3	0	0
736408	20160320	1	0	1	4	0	0
736408	20160320	1	0	1	5	0	0
736408	20160320	1	0	1	6	0	0
736408	20160320	1	0	1	7	0	0
736408	20160320	1	0	1	8	0	0
736408	20160320	1	0	1	9	0	0
736408	20160320	1	0	1	10	0	0

Dominance graph generated game in the Matlab game format for the year of 2016

736408	20160320	1	0	1	2	0	0
736408	20160320	2	0	1	3	0	0
736408	20160320	3	0	1	4	0	0
736408	20160320	4	0	1	5	0	0
736408	20160320	5	0	1	6	0	0
736408	20160320	6	0	1	7	0	0
736408	20160320	7	0	1	8	0	0
736408	20160320	8	0	1	9	0	0
736408	20160320	9	0	1	10	0	0

Weak Dominance graph generated game in the Matlab game format for the year of 2016

NFL Week-to-Week Rankings

- 2010 to 2019
- ESPN Preseason Power Ranking
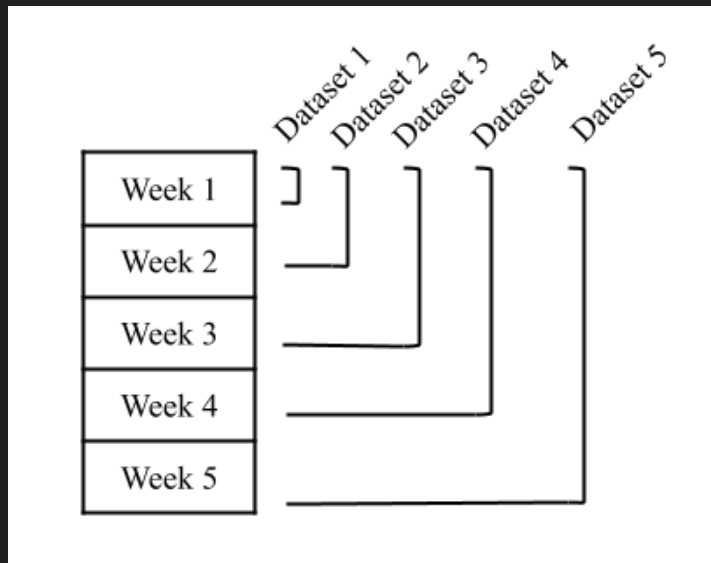
Results & Analysis

Dell Technologies Match Play - Dominance Graph

2015 Dell Technologies Match Play – Dominance Graph Seeding Methods Results

Single-Elimination Round Finalists	WR	AR	SC	CD (0.1)	CD (1.0)	SM	MD (0.1)	MD (1.0)	SE	ED (32)
McIlroy	1	1	T1	1	1	N/A	1	1	T1	1
Woodland	50	2	T10	49	50	N/A	53	49	T1	48
Willett	48	3	T1	48	47	N/A	59	48	T1	47
Furyk	5	4	T13	5	5	N/A	5	5	33	5
Casey	36	T5	T1	36	35	N/A	37	34	T9	32
Oosthuizen	29	T5	T1	27	27	N/A	26	28	T1	27
Senden	60	T5	T10	59	60	N/A	51	57	T13	58
Fleetwood	54	T5	T13	55	54	N/A	57	55	T13	52
Matsuyama	16	T9	T1	15	14	N/A	16	16	T1	13
Schwartzel	37	T9	T1	35	36	N/A	35	37	T1	33
Holmes	12	T9	T10	11	11	N/A	13	12	T13	11
Fowler	13	T9	T10	13	12	N/A	15	13	T9	9
Leishman	56	T9	T1	53	55	N/A	50	53	T9	54
Mahan	31	T9	T1	30	30	N/A	38	30	T1	29
Grace	38	T9	T13	38	38	N/A	36	38	T13	37
Westwood	26	T9	T1	25	25	N/A	19	22	T1	24

# Dell Technologies Match Play - Weak Dominance Graph

2015 Dell Technologies Match Play Weak Dominance Graph Results

Actual Results		Colley (0.1)		Colley (1.0)		Massey (0.1)		Massey (1.0)		Elo (32)	
1	McIlroy	1	McIlroy	1	McIlroy	1	McIlroy	1	McIlroy	1	McIlroy
2	Woodland	2	Fowler	2	Willett	4	Fowler	2	Willett	2	Westwood
3	Willett	3	Willett	3	Schwartzel	5	Willett	3	Fowler	3	Oosthuizen
4	Furyk	4	Senden	4	Senden	6	Woodland	4	Woodland	4	Schwartzel
T5	Casey	5	Schwartzel	5	Fowler	7	Matsuyama	5	Senden	5	Woodland
T5	Oosthuizen	6	Woodland	6	Woodland	8	Senden	7	Schwartzel	6	Willett
T5	Senden	7	Westwood	7	Westwood	9	Mahan	8	Westwood	7	Matsuyama
T5	Fleetwood	8	Mahan	8	Matsuyama	11	Westwood	9	Matsuyama	8	Mahan
T9	Matsuyama	9	Matsuyama	9	Leishman	12	Leishman	10	Mahan	9	Senden
T9	Schwartzel	10	Leishman	10	Casey	14	Furyk	11	Leishman	10	Fowler
T9	Holmes	11	Oosthuizen	11	Mahan	16	Holmes	12	Casey	11	Leishman
T9	Fowler	12	Casey	12	Oosthuizen	20	Oosthuizen	16	Grace	12	Casey
T9	Leishman	16	Grace	15	Grace	22	Grace	18	Oosthuizen	14	Grace
T9	Mahan	19	Furyk	22	Furyk	25	Schwartzel	21	Furyk	15	Fleetwood
T9	Grace	25	Holmes	25	Fleetwood	28	Fleetwood	24	Holmes	16	Holmes
T9	Westwood	26	Fleetwood	26	Holmes	50	Casey	27	Fleetwood	24	Furyk

## 2016 Dell Technologies Match Play Weak Dominance Graph Results

Actual Results		Colley (0.1)		Colley (1.0)		Massey (0.1)		Massey (1.0)	
1	Day	1	Spieth	1	Spieth	1	Spieth	1	Spieth
2	Oosthuizen	2	Oosthuizen	2	Oosthuizen	5	Reed	2	Reed
3	Cabrera-Bello	3	Reed	3	Reed	6	Koepka	3	Oosthuizen
4	McIlroy	4	Haas	4	Day	7	Haas	4	Day
T5	D Johnson	5	Z Johnson	5	Z Johnson	8	Oosthuizen	6	Snedeker
T5	Moore	6	Cabrera-Bello	6	Snedeker	9	Cabrera-Bello	8	Z Johnson
T5	Kirk	7	Day	7	Haas	14	Kirk	9	Cabrera-bello
T5	Koepka	8	Snedeker	8	Cabrera-Bello	15	Z Johnson	10	Haas
T9	Spieth	9	Kuchar	9	Kuchar	16	Snedeker	11	Koepka
T9	Reed	10	McIlroy	11	McIlroy	18	Day	13	Kuchar
T9	An	16	Koepka	16	Koepka	23	Kuchar	16	D Johnson
T9	Kizzire	17	D Johnson	17	D Johnson	24	D Johnson	19	McIlroy
T9	Haas	18	An	18	An	31	Moore	22	An
T9	Z Johnson	22	Kirk	24	Kirk	42	Kizzire	23	Kirk
T9	Snedeker	24	Moore	26	Moore	43	An	29	Moore
T9	Kuchar	42	Kizzire	44	Kizzire	61	McIlroy	44	Kizzire

NFL Week-to-Week Predicabilities

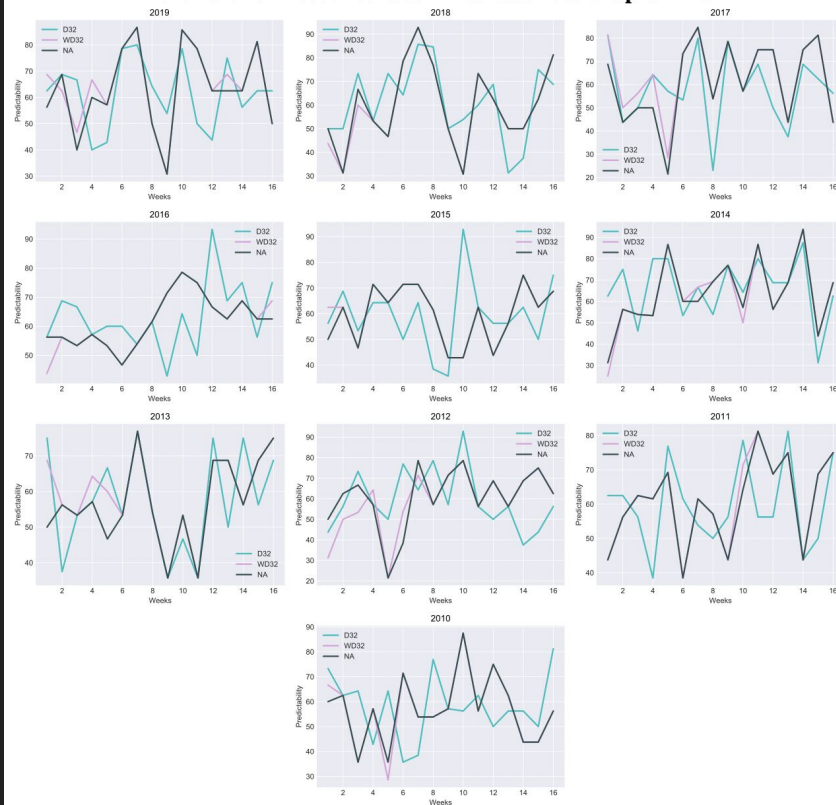2010-2019 NFL Week-to-Week Predictabilities Graphs – Colley
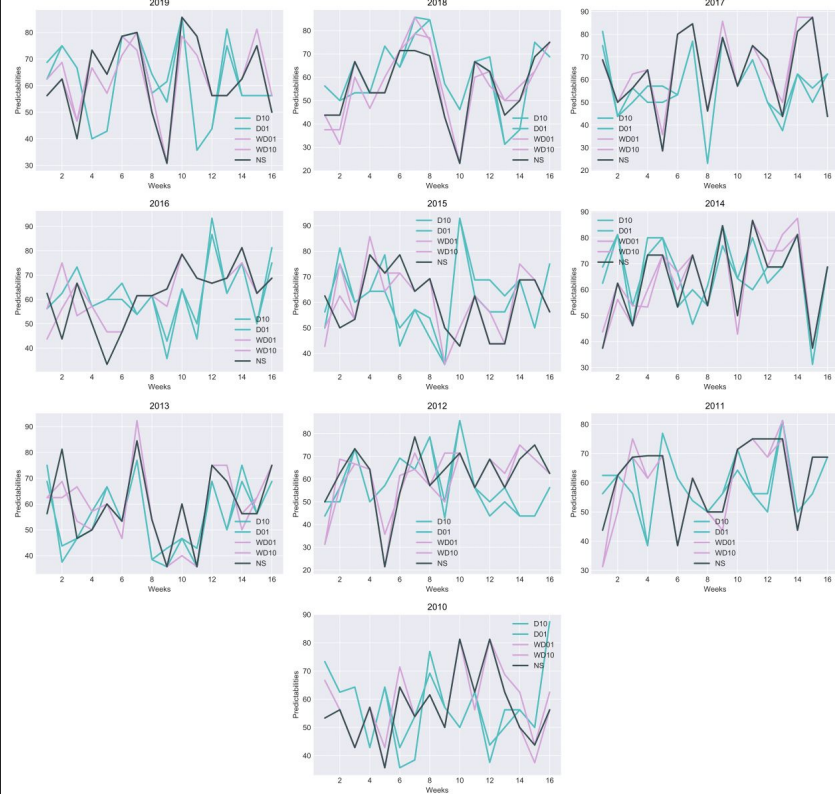
2010-2019 NFL Week-to-Week Predictabilities Graphs – Massey
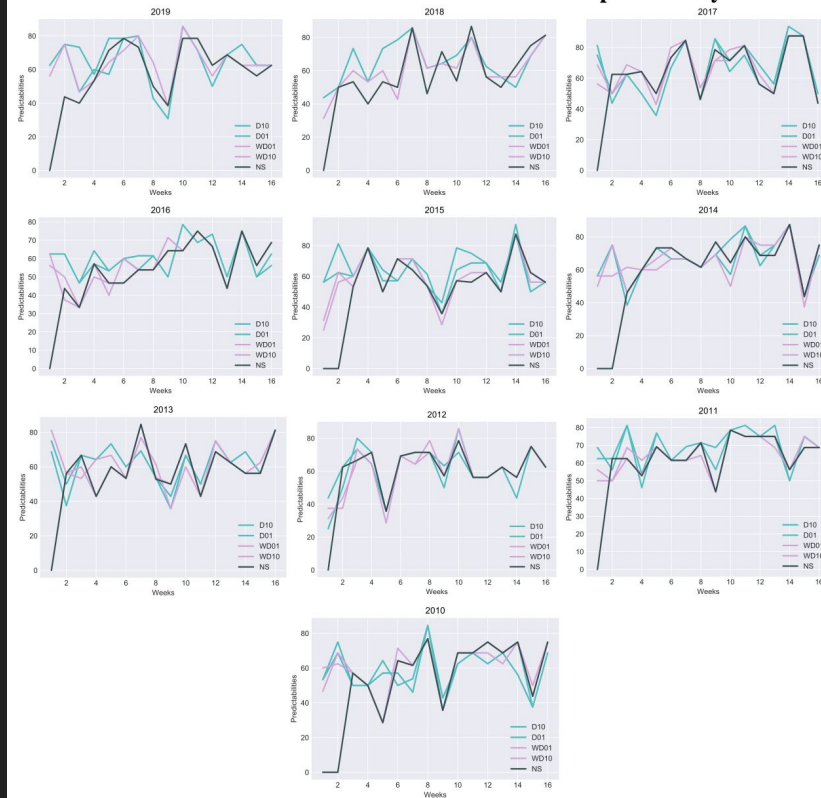
NFL Week-to-Week Predicabilities

2010-2019 NFL Week-to-Week Predictabilities Graphs – Elo

Conclusion