Hedonic games capture voting patterns in Israeli Parliament

Data: The 20th Knesset
- 147 politicians
- 7515 bills voted

Hedonic Game: Appreciation of Friends
- One of several hedonic game models we consider
- Players view all other players as either friends or enemies
- Players prefer to be with as many friends as possible

Competing Machine Learning Models

k-means (k=2)
- Lacks granularity
- Danny Danon Osnat Mark

k-means (k=10)
- Mixed Coalition Implausible
- Avigdor Lieberman Orly Levy Sharon Gal

Stochastic Block Model
- Coalition structure not meaningful

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Learning Cooperative Solution Concepts from Voting Behavior
A Case Study on the Israeli Knesset

Read our paper!
Try our demo!

Have a chat! alan.tsang@carleton.ca