Identification of skill in an online game:
The case of Fantasy Premier League

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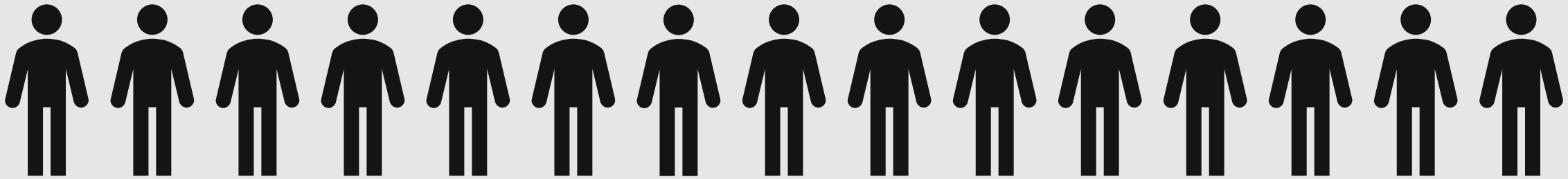
What is Fantasy Premier League?

- Online game where users are provided with a virtual £100 million budget to assemble a squad of 15 real-life Premier League footballers.
- Each week choosing 11 of them to ‘start’ for the user’s team, who then receive points based upon their statistical performance in the real game.
- Also choose one **captain** who receives double points. The challenge of the game is to **determine an optimal way of spending your budget as to maximize your points.**



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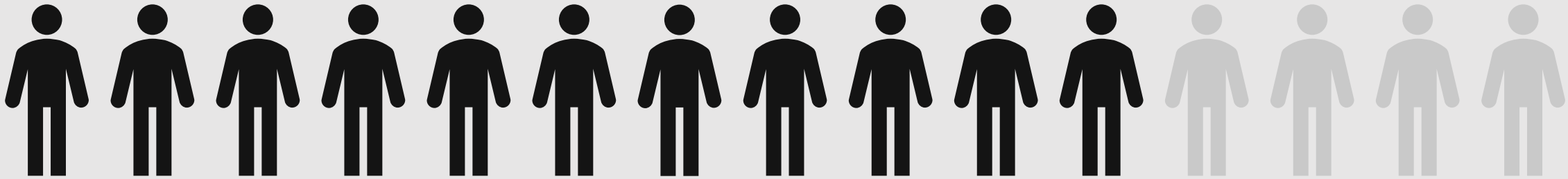

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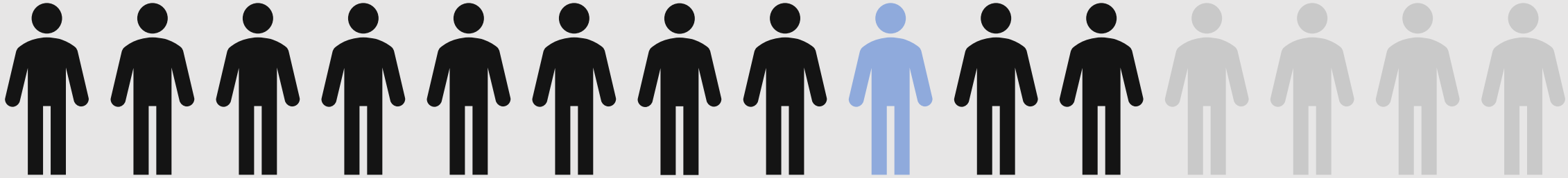
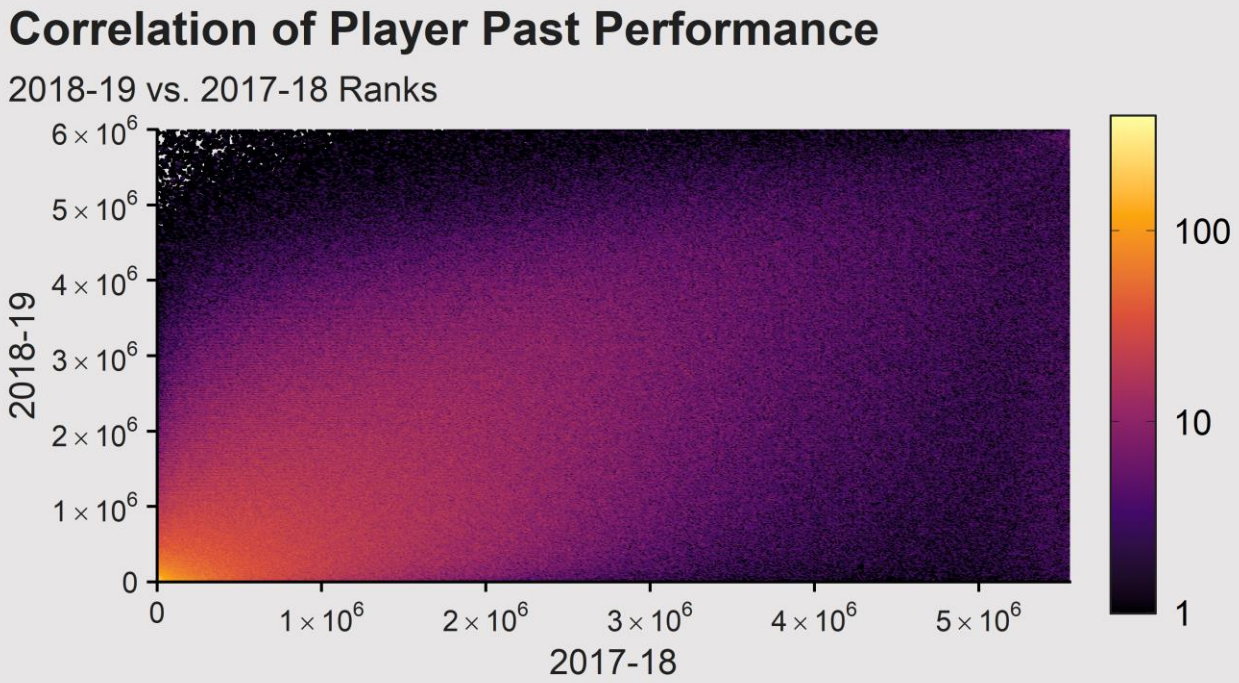
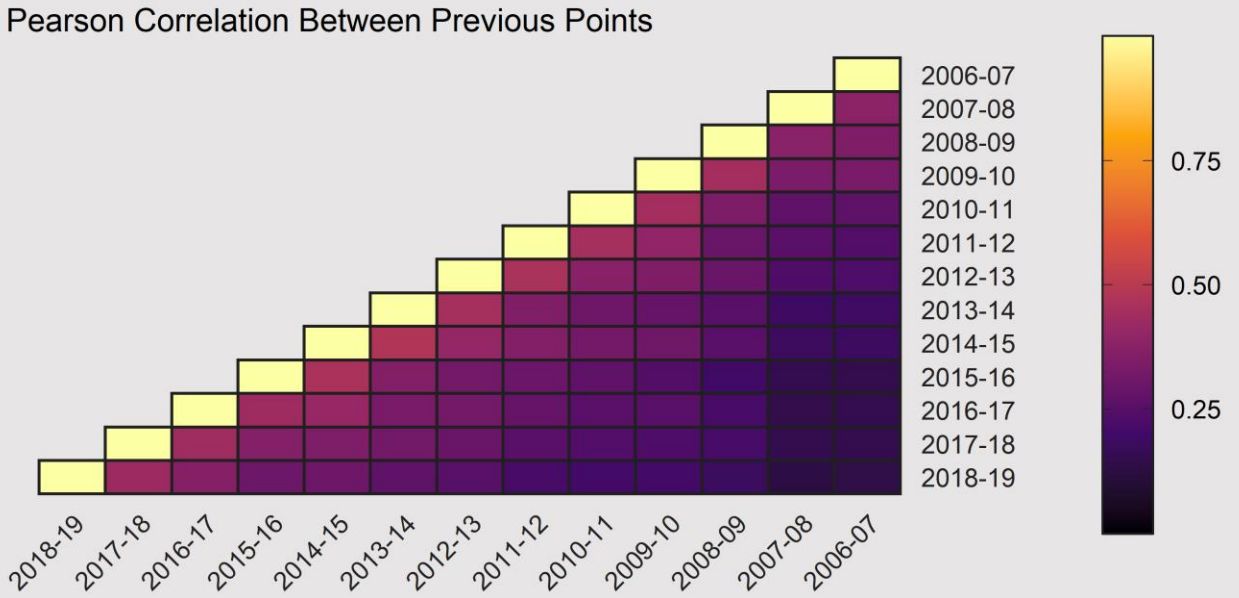
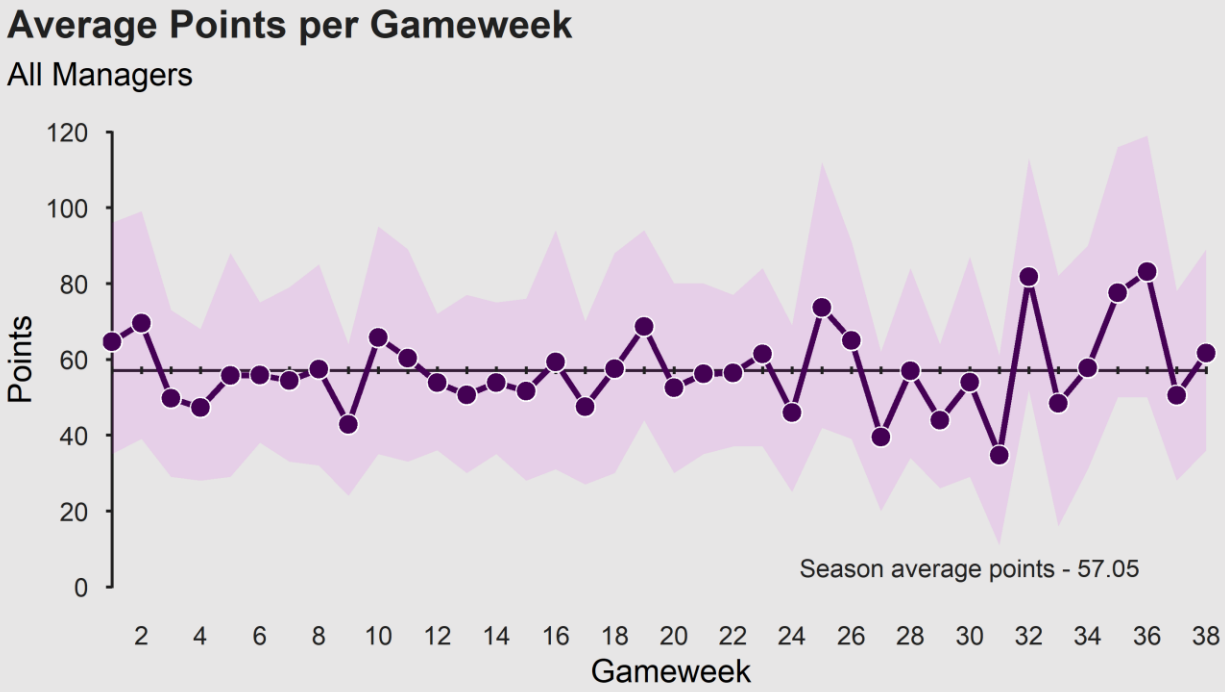


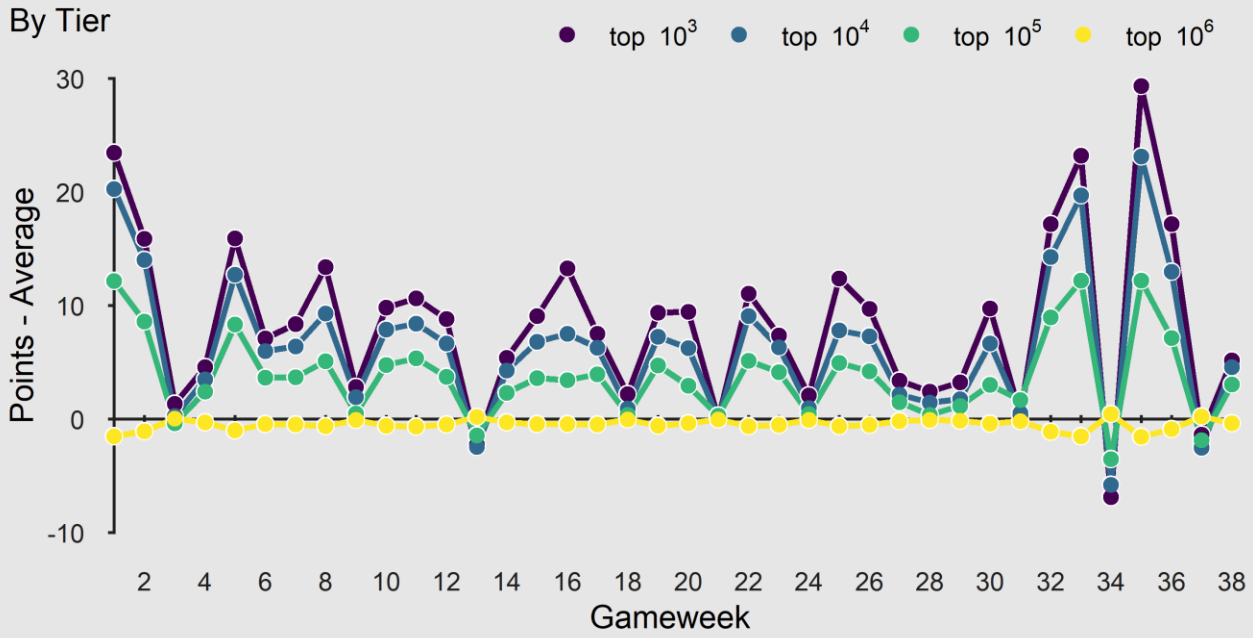
Consistency Between Performances?



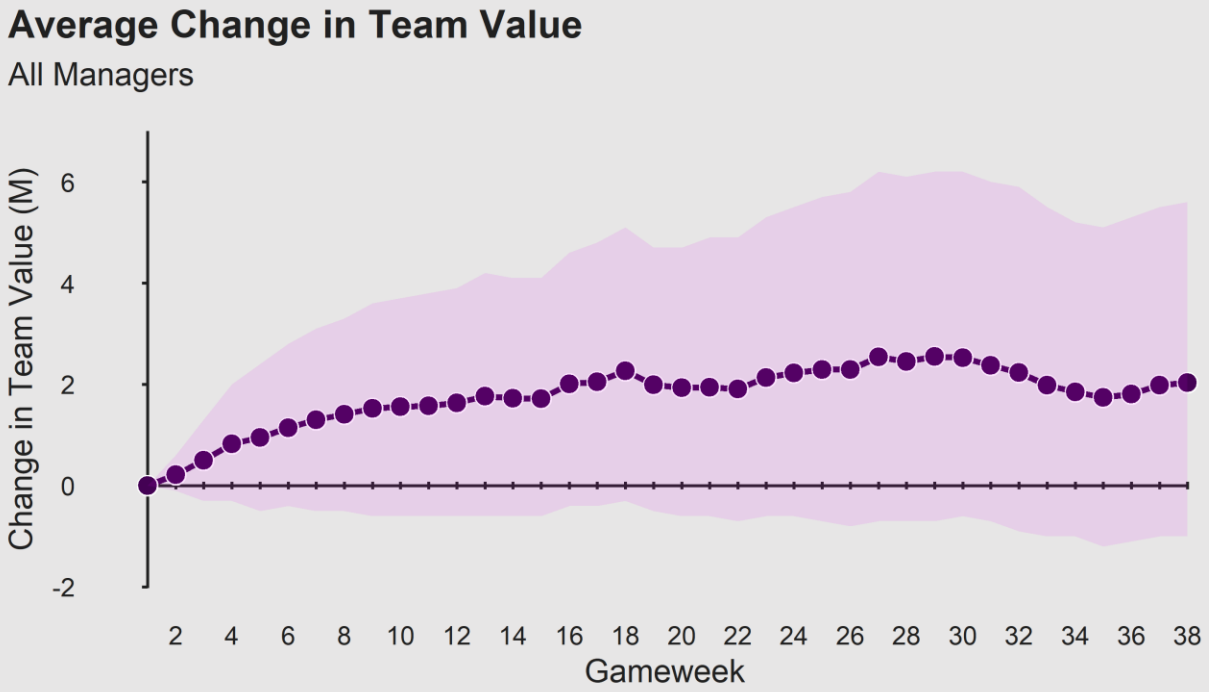


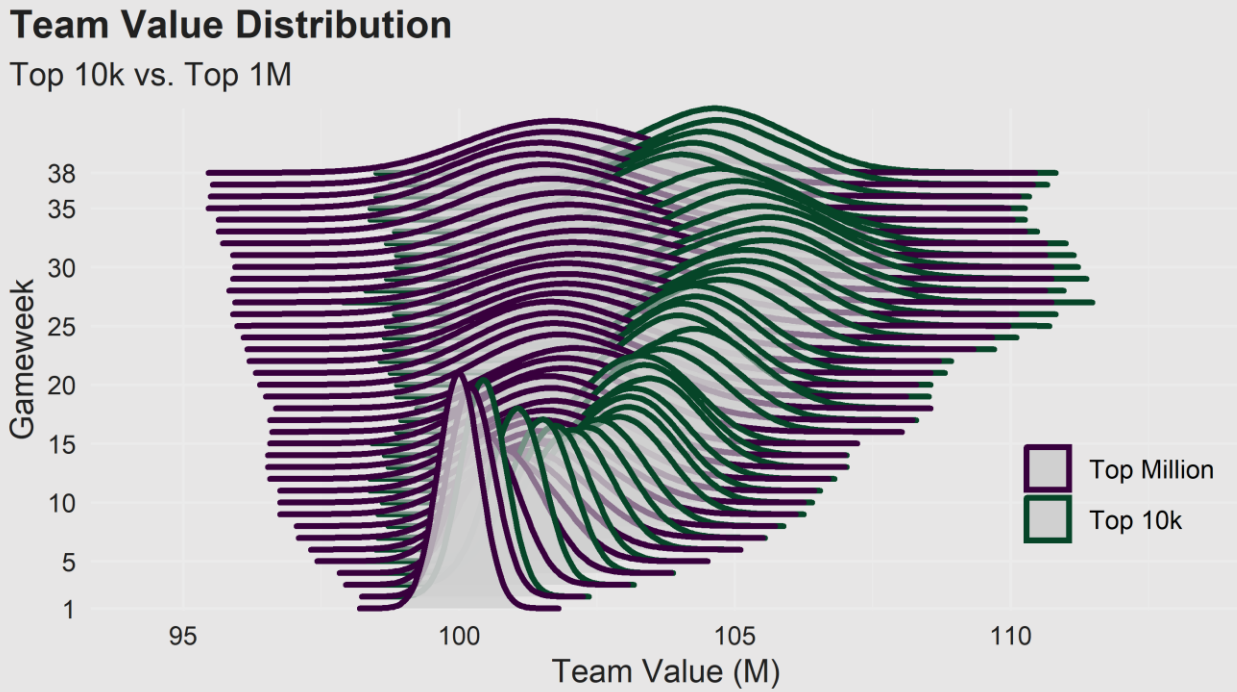
Tiers among managers



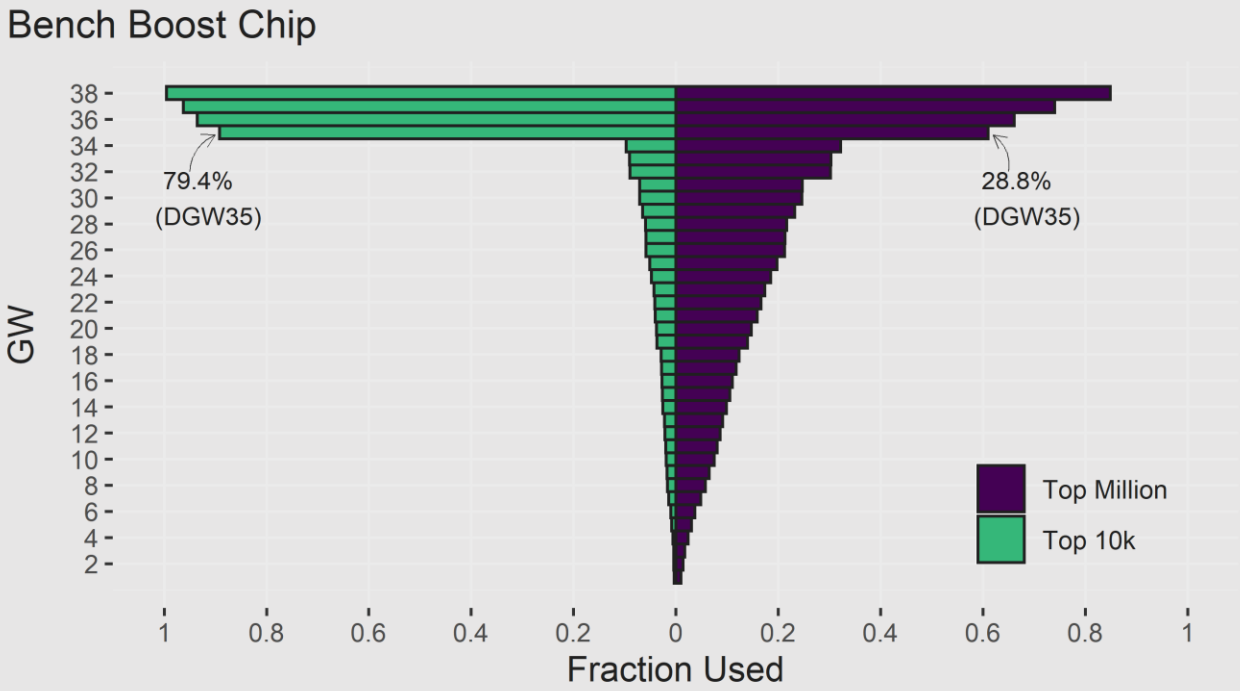


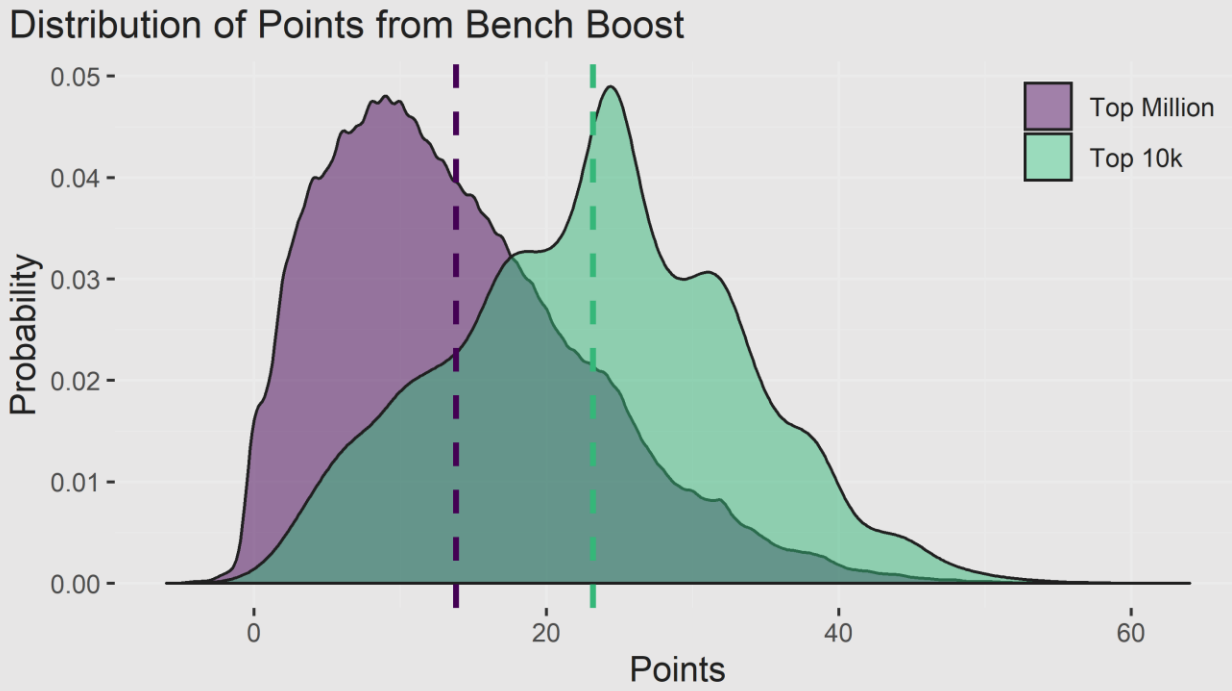
Difference in skill - money



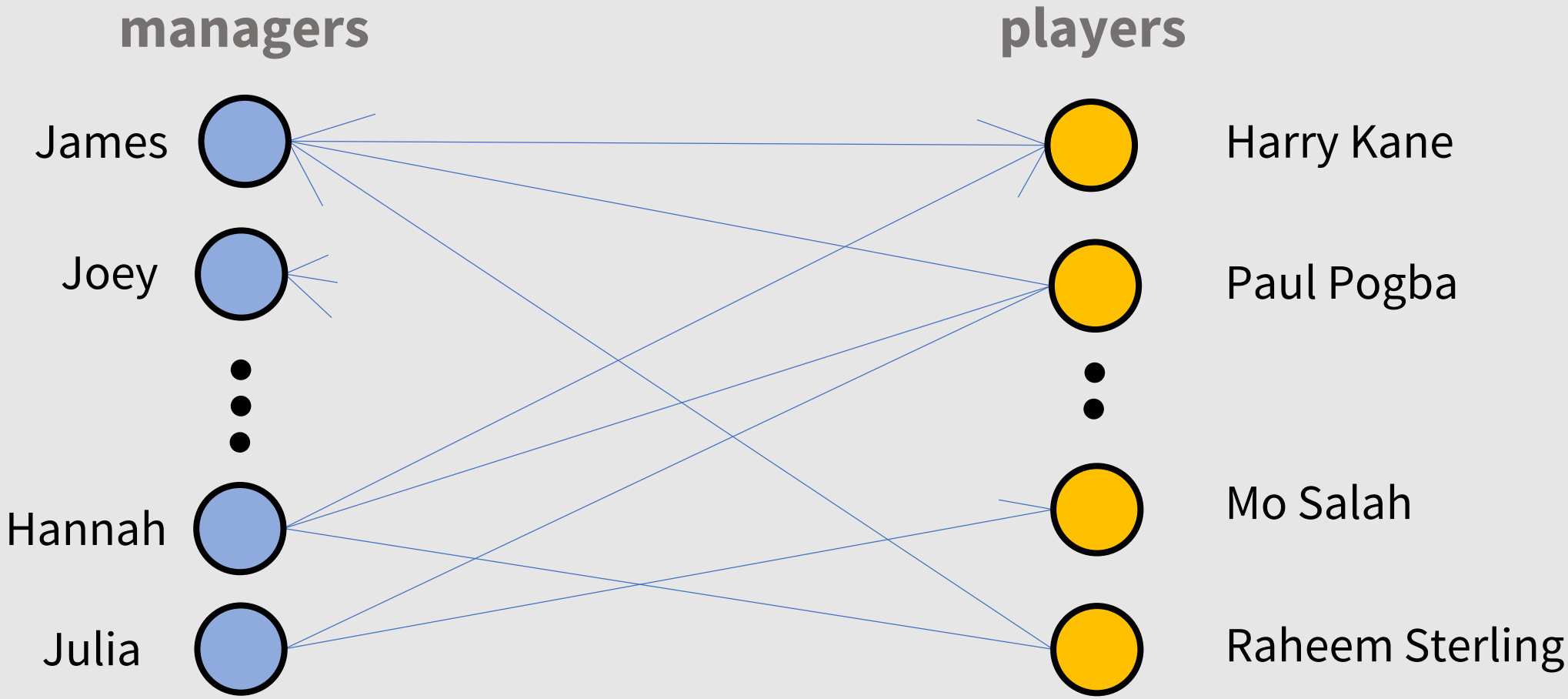


Difference in skill - chips





Network analysis



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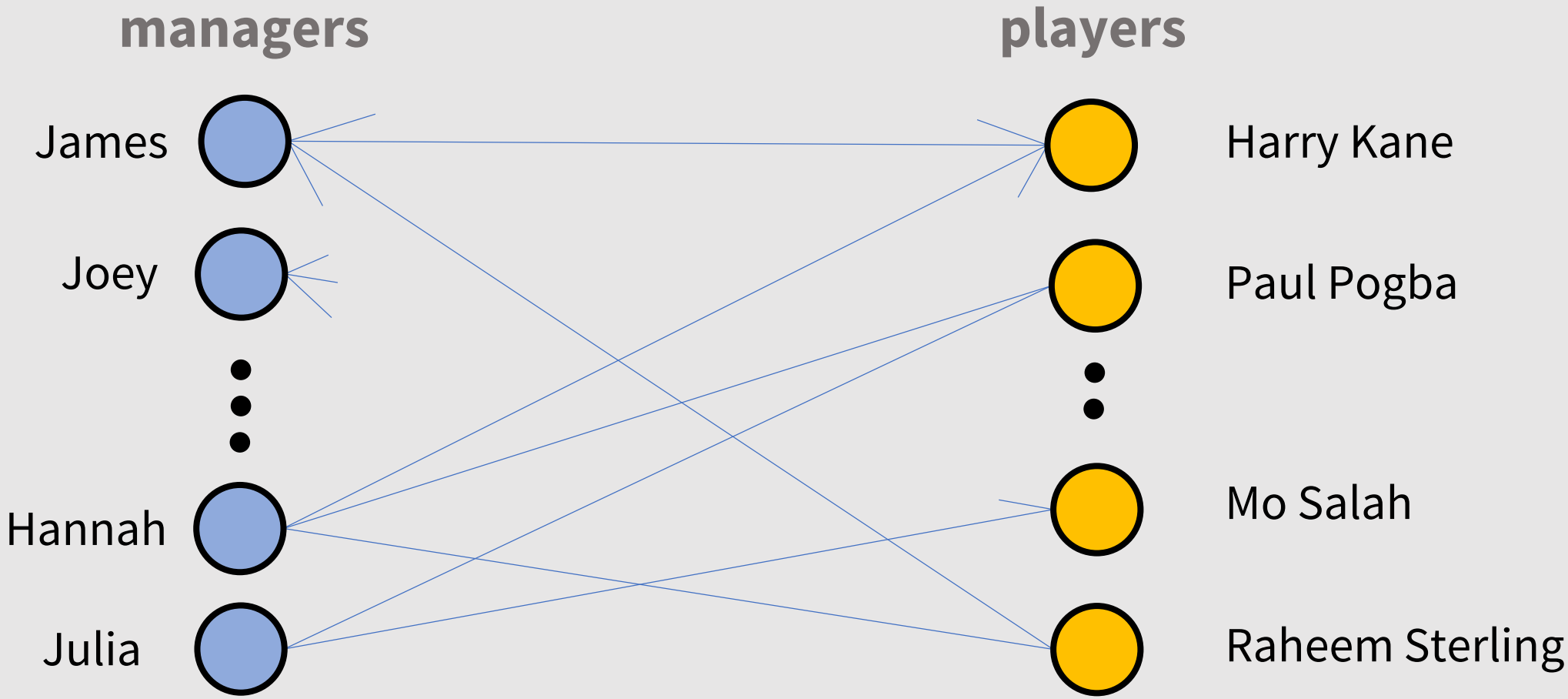

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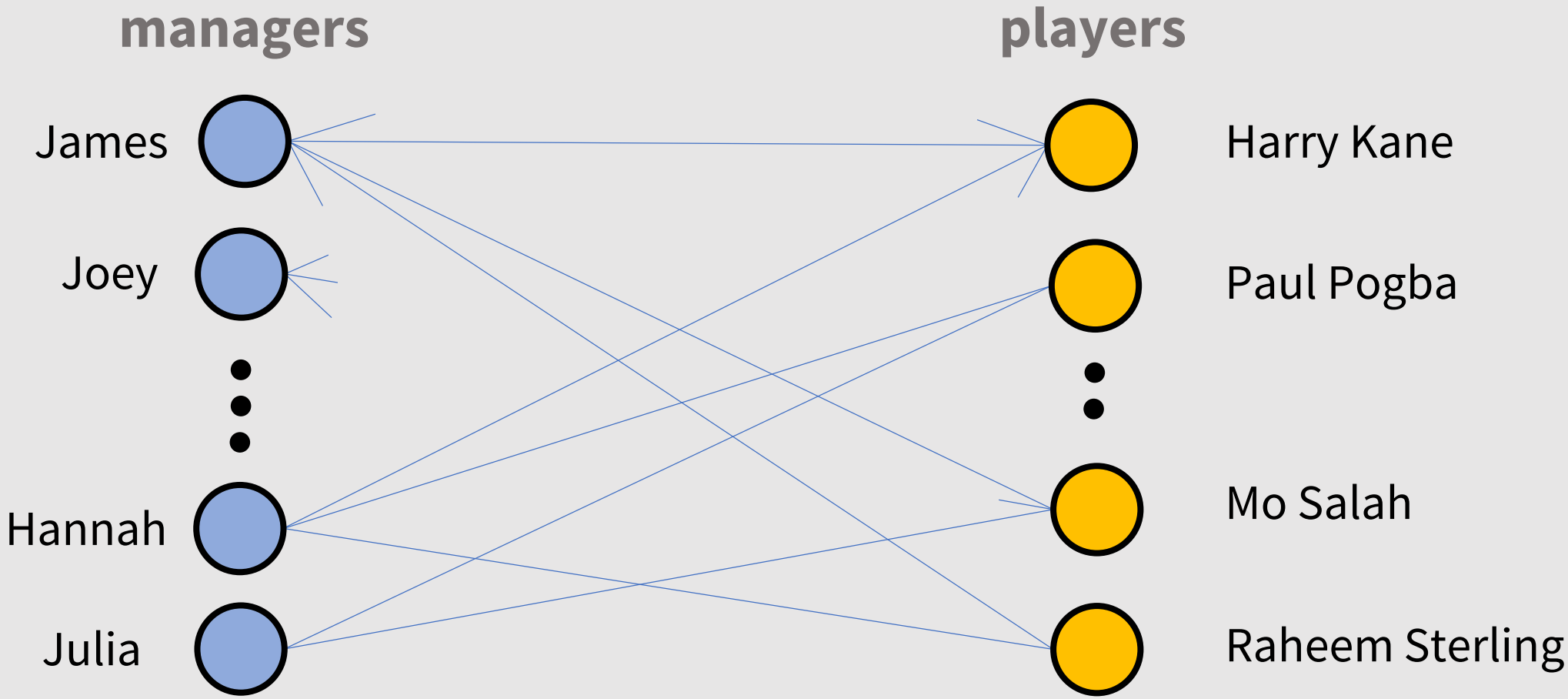

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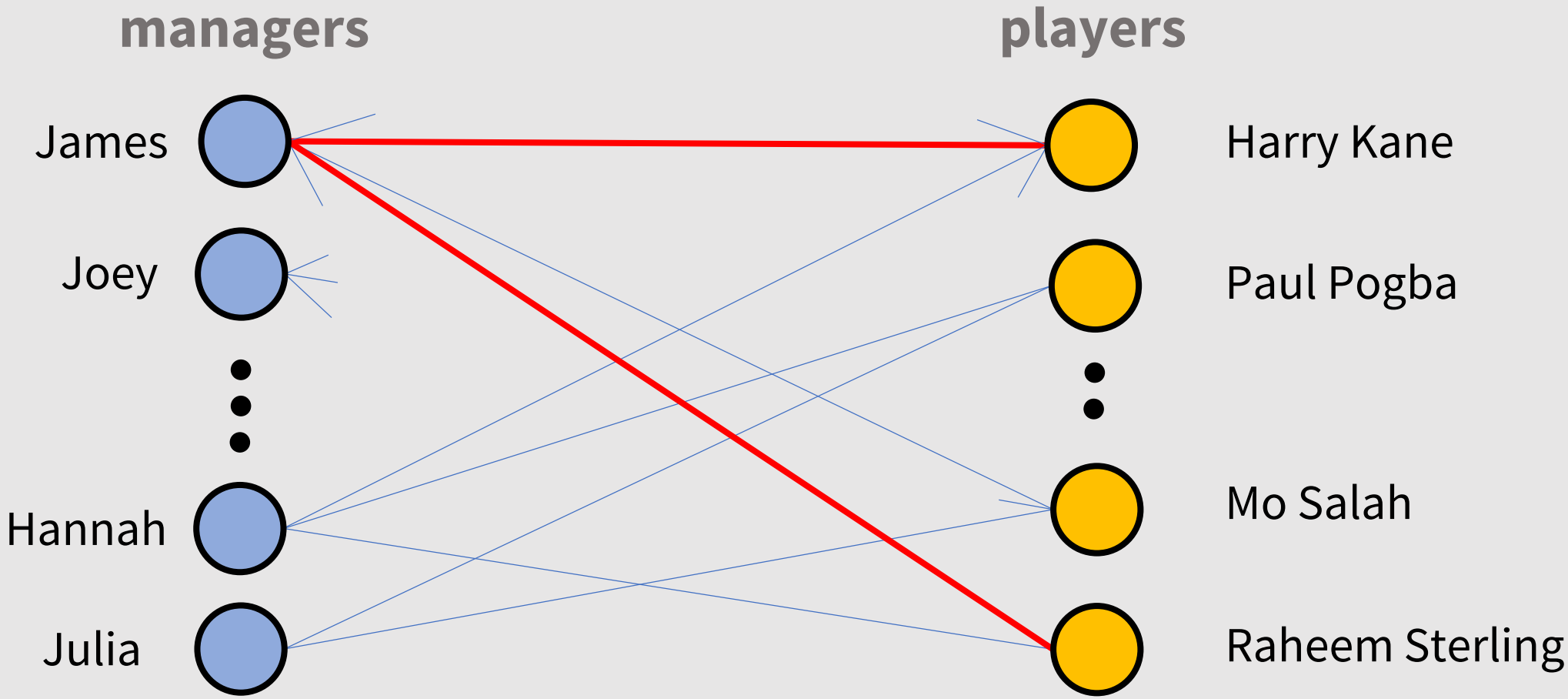

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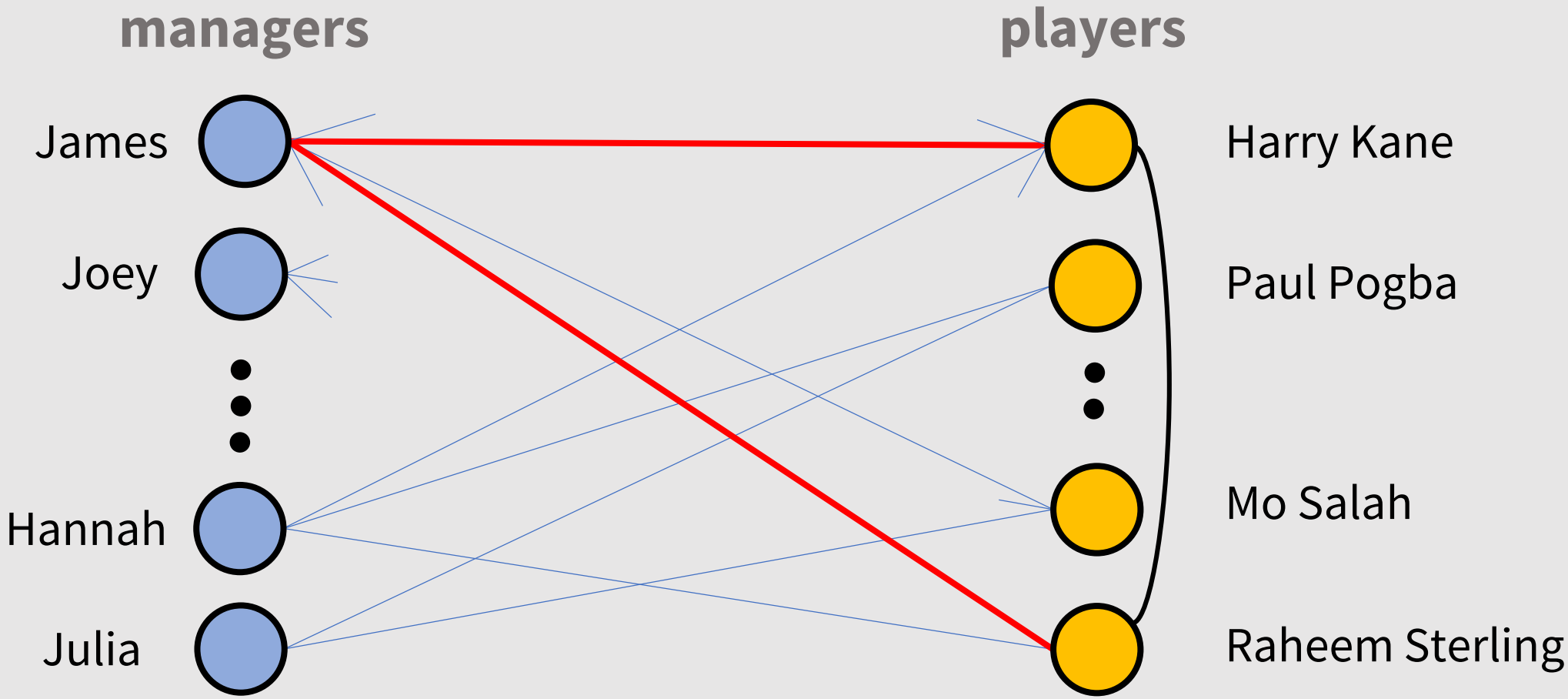

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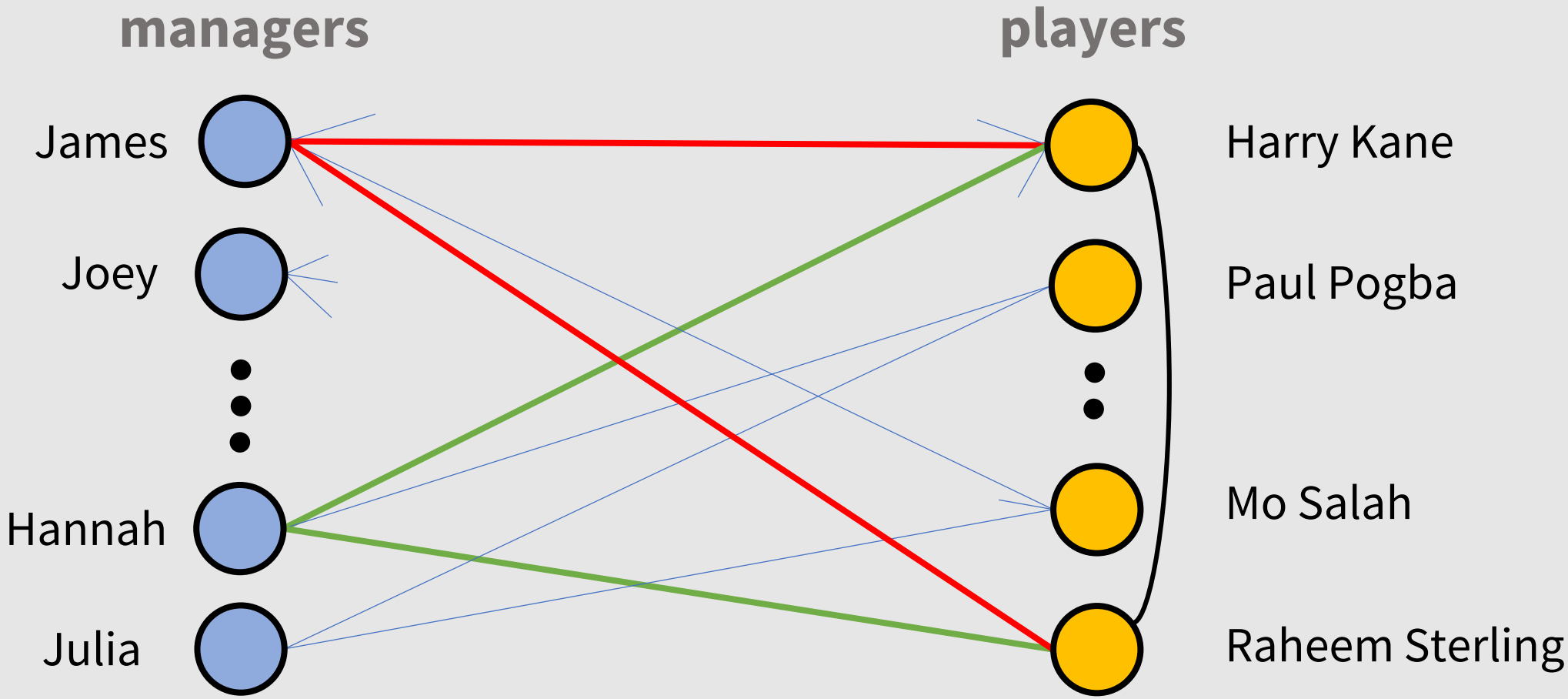

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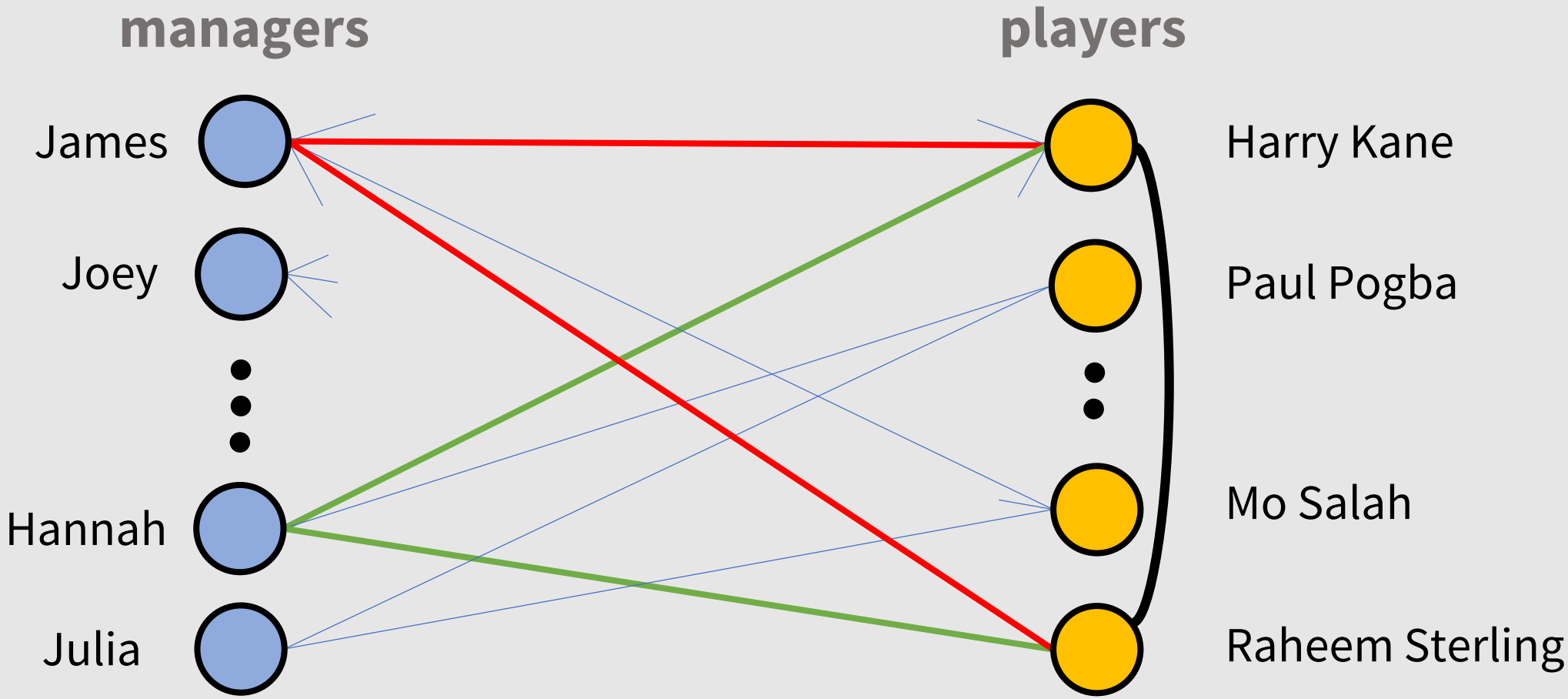

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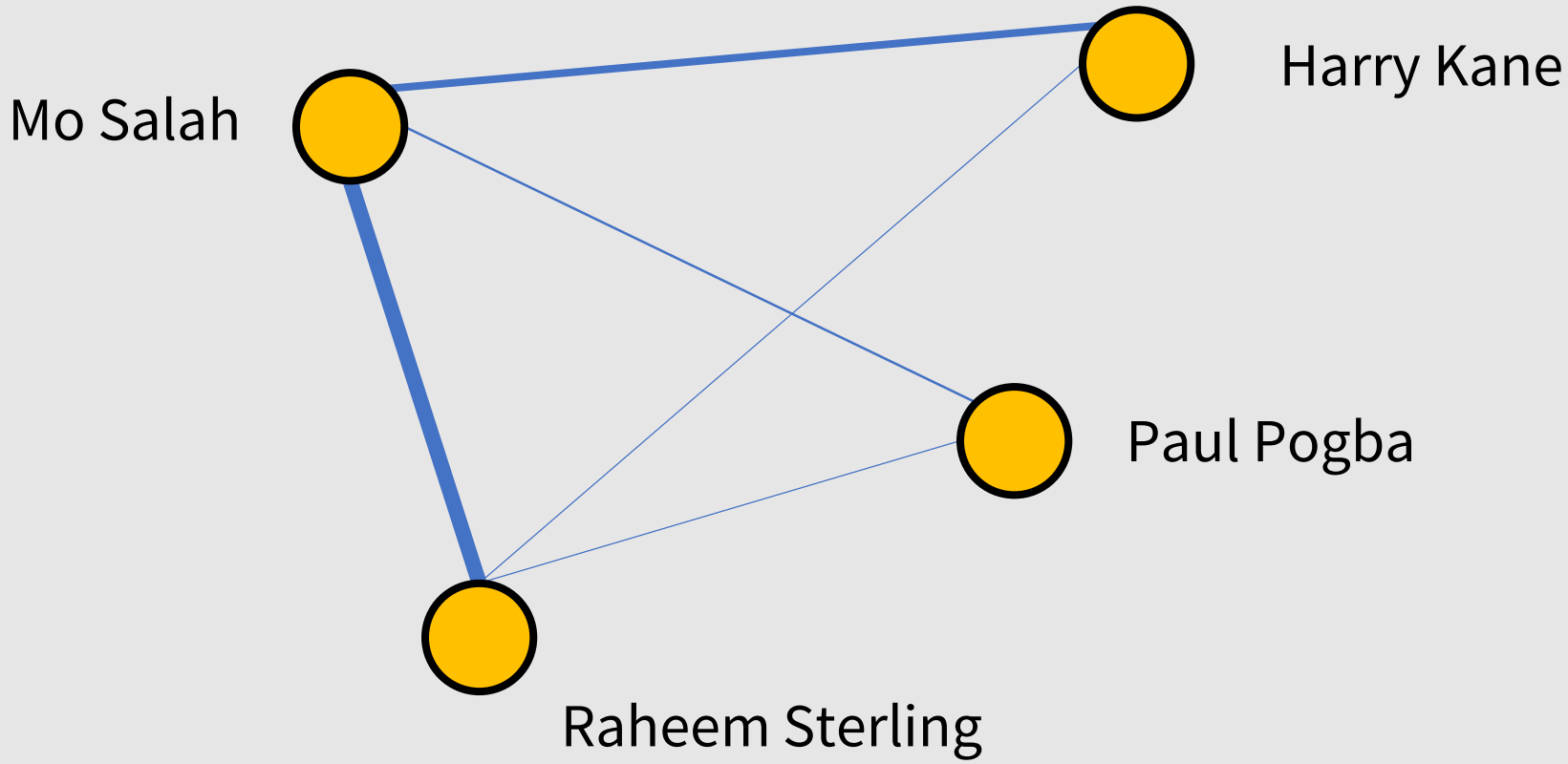
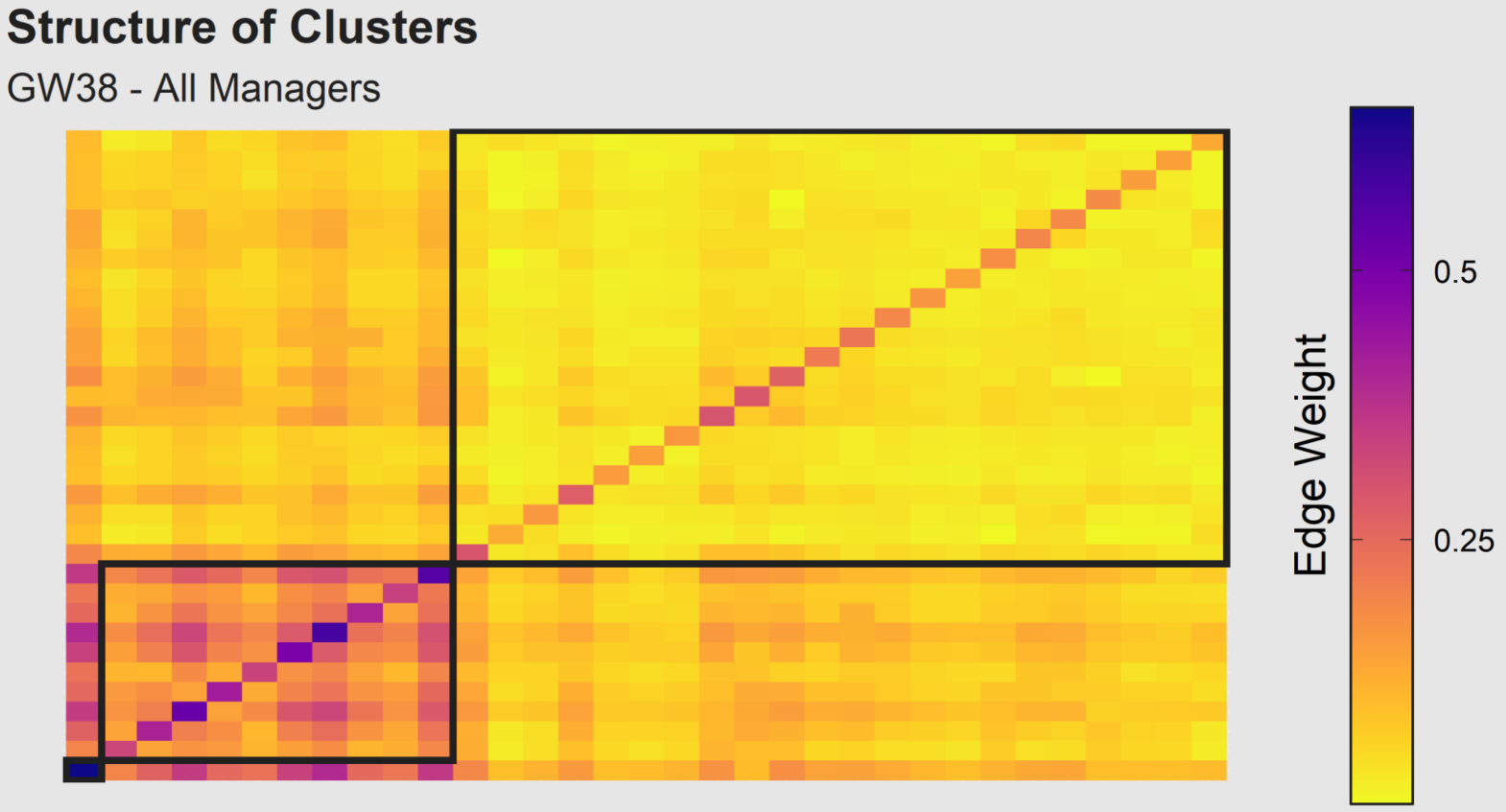


Template team

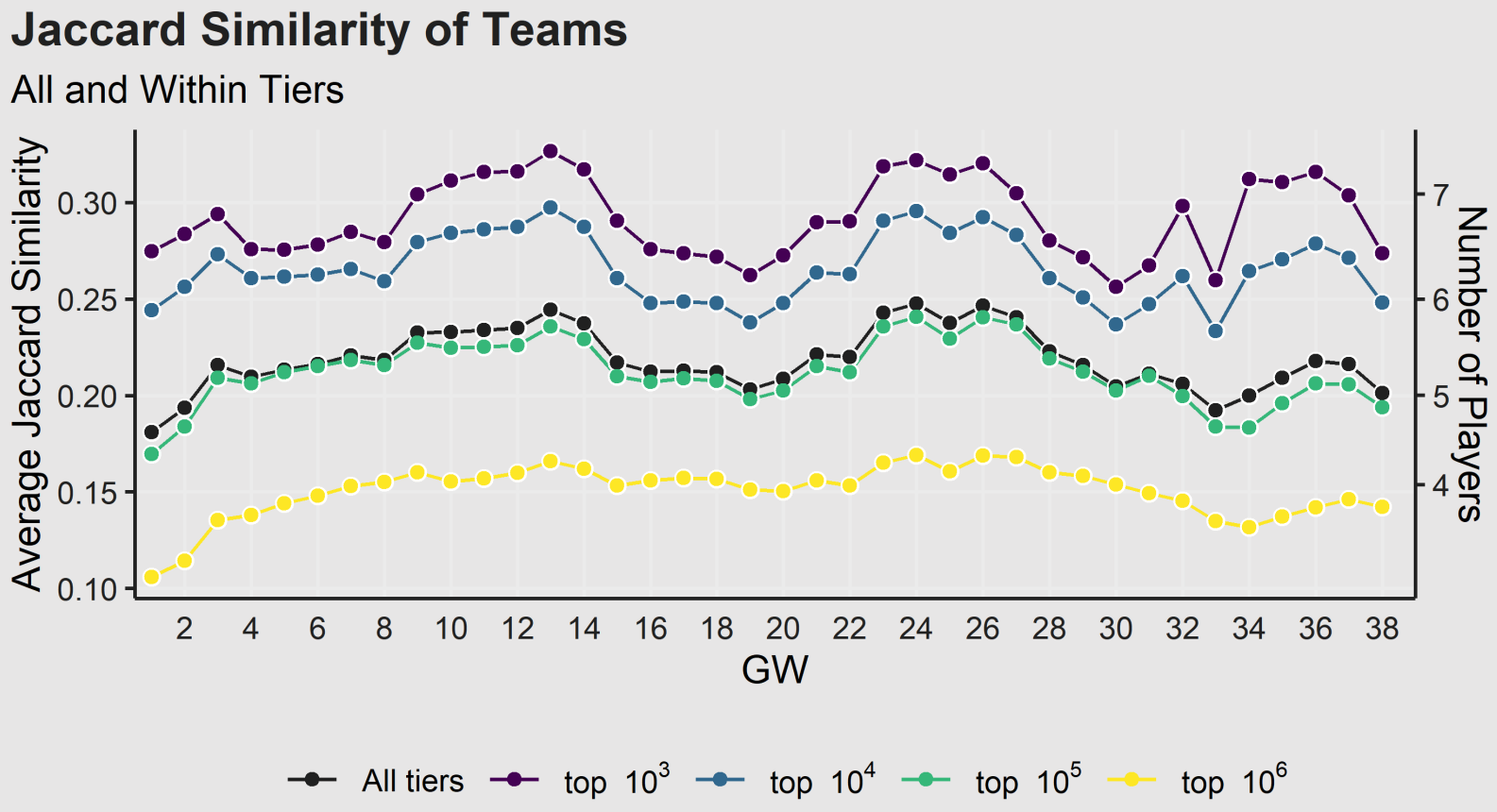
- From the network we can identify **clusters of players** based upon their section frequency.
- Find that four clusters can describe the different groups with **three of them** containing only **~30 players** (out of >600).



Similarity of teams

- We determine the similarity between two teams A and B through the **Jaccard Similarity** measure.

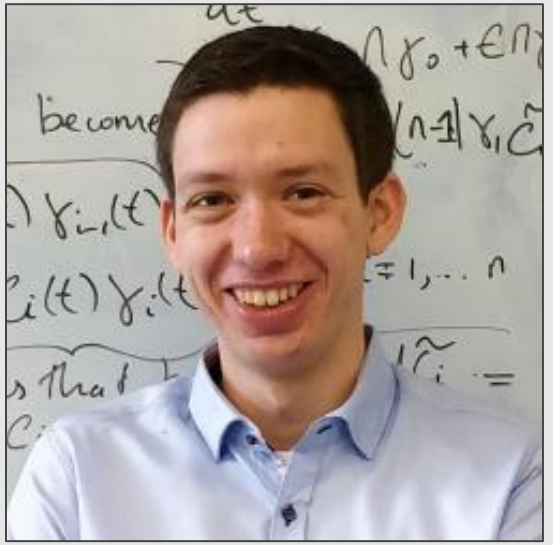
$$J(A,B) = \frac{|A \cap B|}{|A \cup B|}$$



Collaborators & Thanks

James Gleeson

David O'Sullivan



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Thank you for listening!

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arXiv: 2009.01206

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