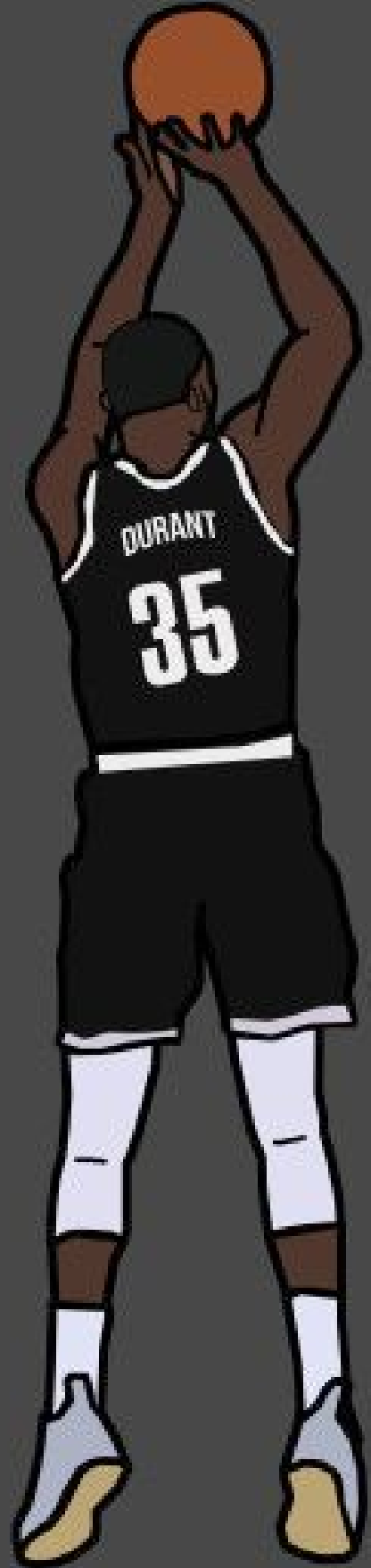


**NBA 2022 W/L**

**Predictor**

**By: Connor McClain  
&  
James Nix**





# Overview

- 205 Sports Solutions' goal is to predict the NBA Playoff Champion
- Playoff outcome is based on regular season individual player rankings

# Index

- **Data**
- **Model**
- **Results**
- **Conclusion**
- **Future work**



# Data

- **NBA, ESPN & Basketball-Reference**
- **Player ranking, players on team and game data**
- **Player rankings to predict points scored**
- **Games from 2001-2022**
- **Trained model on 2001-2021**

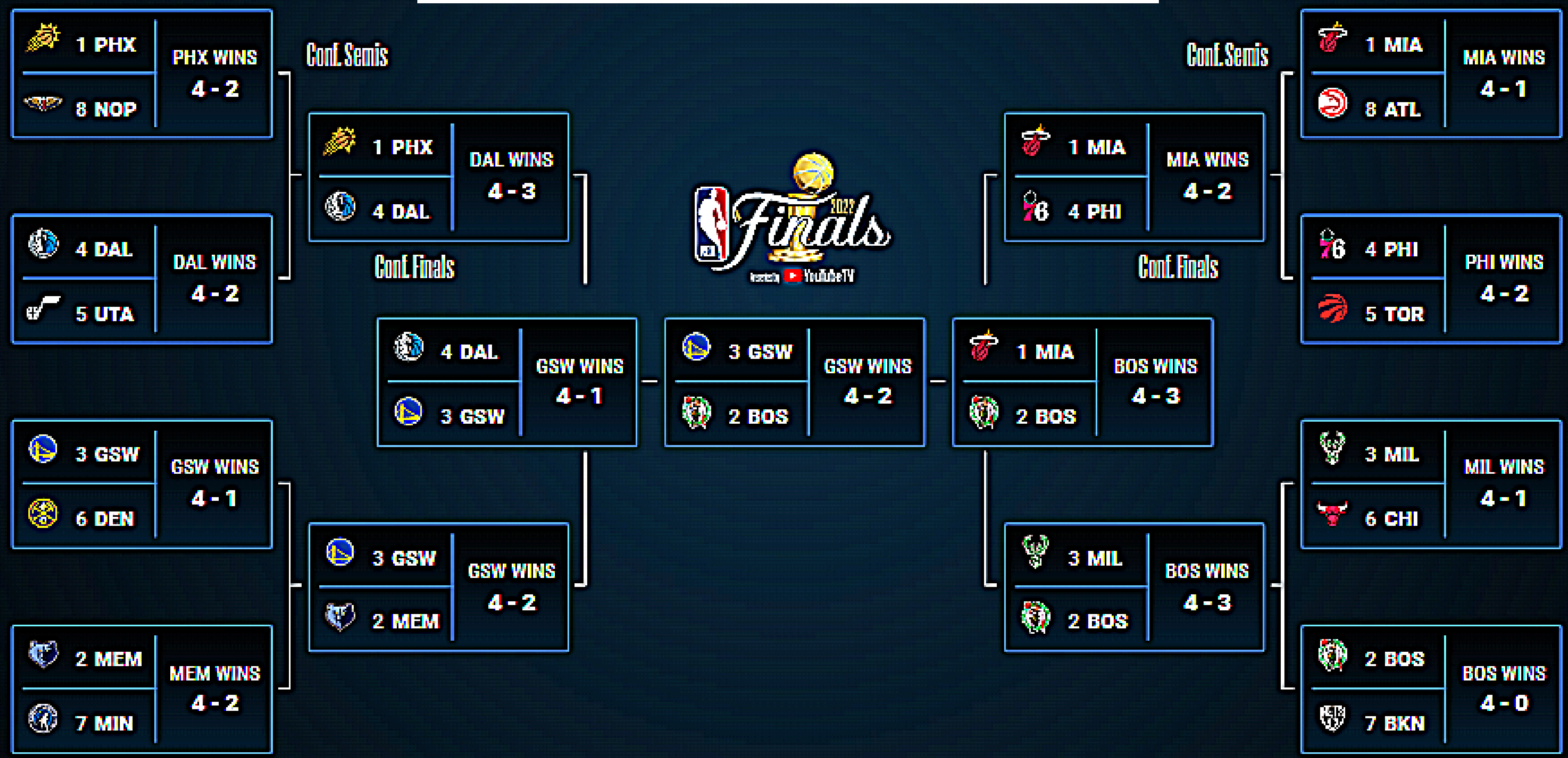


# Model

- XGBoosted model
- Predicted scores have an average error of +/- 11.52 points
- The max error is 38.13 points
- Only 28% of variance is explained





# Overall Results









# Overall Results

|  |          |
|--|----------|
|  1 PHX | PHX WINS |
|  8 NOP | 4 - 2    |



Conf. Semis

|   |          |
|---|----------|
|  1 PHX | DAL WINS |
|  4 DAL | 4 - 3    |

Conf. Finals

|  |          |
|--|----------|
|  4 DAL | DAL WINS |
|  5 UTA | 4 - 2    |



|  |          |
|--|----------|
|  3 GSW | GSW WINS |
|  6 DEN | 4 - 1    |



|  |          |
|--|----------|
|  2 MEM | MEM WINS |
|  7 MIN | 4 - 2    |



|   |          |
|---|----------|
|  3 GSW | GSW WINS |
|  2 MEM | 4 - 2    |

|   |          |
|---|----------|
|  4 DAL  | GSW WINS |
|  3 GSW | 4 - 1    |



|   |          |
|---|----------|
|  3 GSW  | GSW WINS |
|  2 BOS | 4 - 2    |



|   |          |
|---|----------|
|  1 MIA  | BOS WINS |
|  2 BOS | 4 - 3    |

|   |          |
|---|----------|
|  1 MIA | MIA WINS |
|  4 PHI | 4 - 2    |



Conf. Finals



Conf. Semis

|   |          |
|---|----------|
|  1 MIA | MIA WINS |
|  8 ATL | 4 - 1    |

|   |          |
|---|----------|
|  4 PHI | PHI WINS |
|  5 TOR | 4 - 2    |

|   |          |
|---|----------|
|  3 MIL | MIL WINS |
|  6 CHI | 4 - 1    |



|   |          |
|---|----------|
|  2 BOS | BOS WINS |
|  7 BKN | 4 - 0    |

|   |          |
|---|----------|
|  3 MIL | BOS WINS |
|  2 BOS | 4 - 3    |



WESTERN CONFERENCE

Round 1

1.4



~~|  |          |
|--|----------|
|  1 PHX | PHX WINS |
|  8 NOP | 4-2      |~~

1.1

~~|  |          |
|--|----------|
|  4 DAL | DAL WINS |
|  5 UTA | 4-2      |~~



|  |          |
|--|----------|
|  3 GSW | GSW WINS |
|  6 DEN | 4-1      |

1.5


~~|  |          |
|--|----------|
|  2 MEM | MEM WINS |
|  7 MIN | 4-2      |~~

Conf. Semis

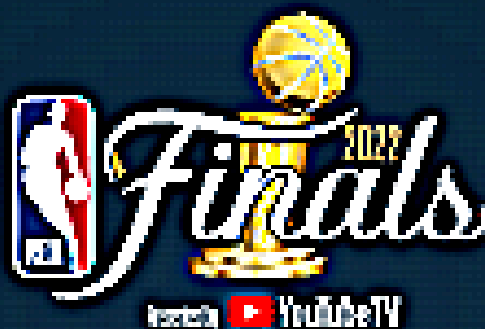
1.7

~~|   |          |
|---|----------|
|  1 PHX | DAL WINS |
|  4 DAL | 4-3      |~~

Conf. Finals



|   |          |
|---|----------|
|  4 DAL  | GSW WINS |
|  3 GSW | 4-1      |

|   |          |
|---|----------|
|  3 GSW | GSW WINS |
|  2 MEM | 4-2      |





3.8

Conf. Semis



~~|   |          |
|---|----------|
|  1 MIA | MIA WINS |
|  4 PHI | 4-2      |~~

4.9

Conf. Finals



~~|   |          |
|---|----------|
|  1 MIA  | BOS WINS |
|  2 BOS | 4-3      |~~

13.8



~~|   |          |
|---|----------|
|  3 MIL | BOS WINS |
|  2 BOS | 4-3      |~~

EASTERN CONFERENCE

Round 1



|   |          |
|---|----------|
|  1 MIA | MIA WINS |
|  8 ATL | 4-1      |

0.4

~~|   |          |
|---|----------|
|  4 PHI | PHI WINS |
|  5 TOR | 4-2      |~~



|   |          |
|---|----------|
|  3 MIL | MIL WINS |
|  6 CHI | 4-1      |

9.3



~~|   |          |
|---|----------|
|  2 BOS | BOS WINS |
|  7 BKN | 4-0      |~~





# Overall Results

~~|  |          |
|--|----------|
|  1 PHX | PHX WINS |
|  8 NOP | 4 - 2    |~~



Conf. Semis



~~|   |          |
|---|----------|
|  1 PHX | DAL WINS |
|  4 DAL | 4 - 3    |~~

Conf. Finals

|   |          |
|---|----------|
|  4 DAL  | GSW WINS |
|  3 GSW | 4 - 1    |







|   |          |
|---|----------|
|  3 GSW  | GSW WINS |
|  2 BOS | 4 - 2    |


~~|   |          |
|---|----------|
|  1 MIA | MIA WINS |
|  4 PHI | 4 - 2    |~~


Conf. Semis



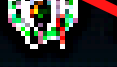



Conf. Finals


~~|   |          |
|---|----------|
|  1 MIA  | BOS WINS |
|  2 BOS | 4 - 3    |~~



|   |          |
|---|----------|
|  1 MIA | MIA WINS |
|  8 ATL | 4 - 1    |

~~|   |          |
|---|----------|
|  4 PHI | PHI WINS |
|  5 TOR | 4 - 2    |~~

|   |          |
|---|----------|
|  3 MIL | MIL WINS |
|  6 CHI | 4 - 1    |

~~|   |          |
|---|----------|
|  3 MIL | BOS WINS |
|  2 BOS | 4 - 3    |~~
~~|   |          |
|---|----------|
|  2 BOS | BOS WINS |
|  7 BKN | 4 - 0    |~~
~~|  |          |
|--|----------|
|  4 DAL | DAL WINS |
|  5 UTA | 4 - 2    |~~

|  |          |
|--|----------|
|  3 GSW | GSW WINS |
|  6 DEN | 4 - 1    |

~~|  |          |
|--|----------|
|  2 MEM | MEM WINS |
|  7 MIN | 4 - 2    |~~

|   |          |
|---|----------|
|  3 GSW | GSW WINS |
|  2 MEM | 4 - 2    |

# Conclusion

- **Model would have predicted bracket winner**
- **Human aspect is missing**
- **SUCCESS**





# Future Work

- Add injury/inactive column
- More data = more training for the model
- App/Website to predict individual game outcomes





# Thank you!

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