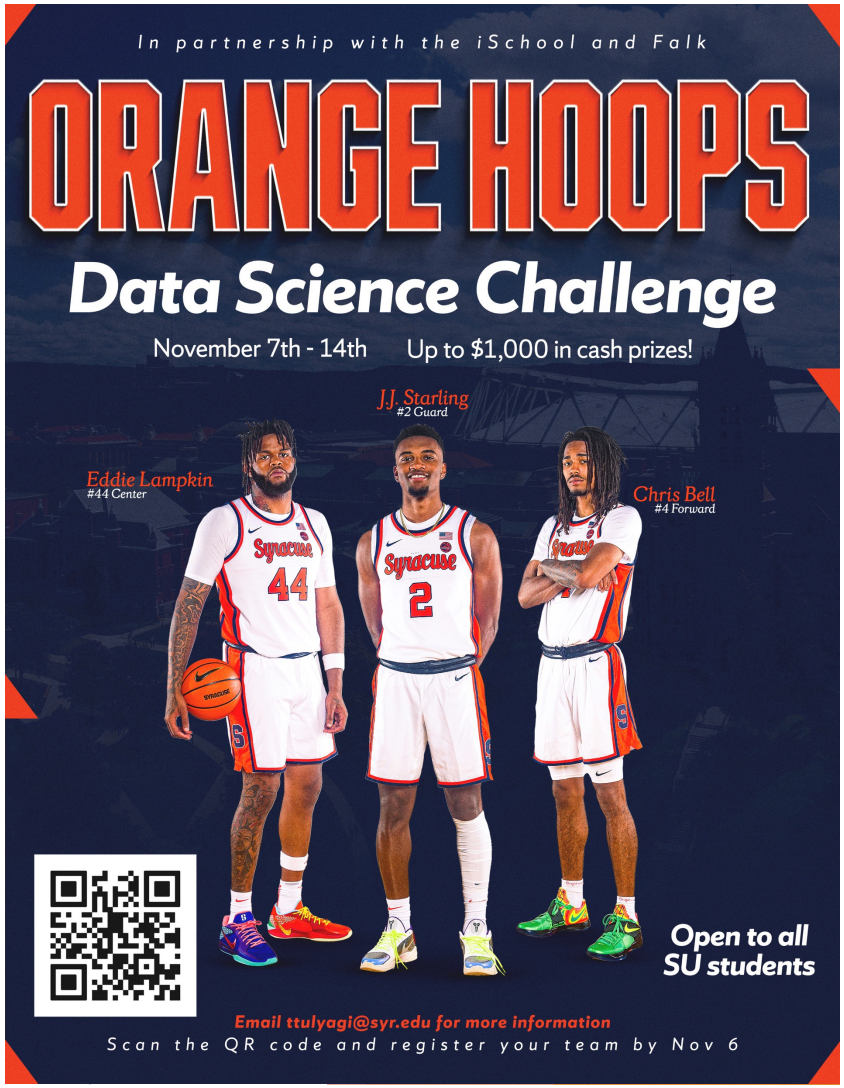
Orange Hoops
Data Science Challenge

Kick-off discussion



Two contests

- Understanding player health and predicting player injuries
- Understanding player performance and predicting who should ‘take the shot’
- Submit to one or both (separate submission for each)

Player Injuries

Goal: Predict player injuries

Data Attributes:

- Player context:
  - Name, Player.ID, Group.Id, Group.name, League.ID, Position
- Session Data:
  - Session.ID, Session_Date
  - Distance..mi., Distance...min..mi., Duration..s., Steps,
  - Speed....of.max....., Speed..max....mph., Speed...mph., Time..s.,
  - Accumulated.Acceleration.Load, Anaerobic.Activity..distance...mi., Jump.Load..J.,
  - Heart.Rate...bpm., Heart.Rate..min....bpm., Heart.Rate..max....bpm., Heart.Rate.Recoveries
  - Human.Core.Temperature....F., Human.Core.Temperature..max.....F., TRIMP
  - Jump.Height..max....ft., Changes.of.Orientation, Exertions
  - Disk.Usage....

Player Performance

Goal: Select a team and suggest who takes winning shot (and why that person)

Data Attributes

- Game information:
  - game_id, date, home, away, referees, arena_location, arena, attendance
- Initial game predictions:
  - win_prob, naive_win_prob, home_favored_by, total_line
- Game situation:
  - play_id, home_time_out_remaining, away_time_out_remaining, half, time_remaining_half,
  - secs_remaining, secs_remaining_absolute
  - home_score, away_score, score_diff
- Play information
  - Description, action_team, play_length, scoring_play, shooter, foul
  - shot_team, shot_outcome, three_pt, free_throw, possession_before, possession_after

Access the Data

- Performance data: https://drive.google.com/file/d/1IlvH2CF3Z65s3Hb5AUFAsgO1OKI1lR6y/view?usp=sharing
- Injury data: https://drive.google.com/drive/folders/1Pt9y6PIbvoK2-o-VwYJ2bO9LS1htcJFt?usp=sharing

Submissions

- **What to submit:**
  - A ‘deck’ explaining your insights
  - A video discussing the deck (at most 10 minutes)
  - A PDF file of a notebook (ex. colab notebook) or a URL of where your code can be reviewed

- **Key evaluation criteria:**
  - Unique insight
  - Actionable insight
  - Easy to understand / explain
  - Easy to understand / recreate

- **How to submit:**
  https://syracuseuniversity.qualtrics.com/jfe/form/SV_b42MWvnzYDn0FMy