

SPORTS ANALYTICS COMPETITION

KICK-OFF MEETING

**SPORTS
ANALYTICS CLUB**

WHAT IS THIS?

- CREATE **PREDICTIVE MODELS** FOR GAME OUTCOMES
- ANALYZE **MULTI-MODAL SPORTS DATA**
- BI-WEEKLY CHECK-IN MEETINGS TO HELP YOU STAY ON TRACK
- ATTEND **WORKSHOPS** FOR TECHNICAL INSIGHTS
- JOIN **INFO SESSIONS** WITH INDUSTRY PROFESSIONALS
- COMPETE FOR PRIZES SUCH AS THE OPPORTUNITY TO WORK DIRECTLY WITH **HUSKY ATHLETICS COACHING STAFF** ON SPORTS ANALYTICS



WHO YOU ARE

OPEN TO ALL SKILL LEVELS!

**NEW TO AI OR AN EXPERIENCED DATA
SCIENTIST, JOIN US TO LEARN AND
INNOVATE IN SPORTS ANALYTICS.**

YOUR TASK

YOUR PRIMARY TASK: BUILD A MODEL TO PREDICT THE WIN PROBABILITY OF HUSKY ATHLETICS GAMES.

SECONDARY TASKS: DEVELOP MODELS TO ANSWER ADDITIONAL QUESTIONS AS STRIKES YOUR TEAM'S INTERESTS, WHICH COULD INCLUDE (AS EXAMPLES):

- PREDICTING PLAYER PERFORMANCE METRICS.
- ANALYSIS OF GAME TACTICS AND PLAYER EFFECTIVENESS.
- ANY OTHER CREATIVE MODEL THAT UTILIZES THE DATA TO UNCOVER INTERESTING INSIGHTS

WHAT YOU ARE GIVEN

- **SUMMARY NUMERICAL GAME DATA OF LAST SEASON (ALREADY CLEANED FOR YOU)**
 - YOU ARE ALLOWED TO USE PREVIOUS SEASON DATA TOO (NOT YET CLEANED)
- **VIDEO FOOTAGE OF PAST GAMES AND NEARLY IMMEDIATE ACCESS TO HOME GAMES THROUGHOUT THE SEASON (AROUND A WEEK FOR AWAY GAMES)**
- **ESSENTIAL SPORTS ANALYTICS PRINCIPLES TO GET YOU STARTED**

DELIVERABLES

- MODEL PREDICTING THE WIN PROBABILITY OF GAMES
- TWO PAGE WRITE-UP (END OF COMPETITION)
 - **SUMMARIZE YOUR TEAM'S MODEL, EXPLAIN RATIONALE BEHIND MODEL CONFIGURATIONS, AND INTERPRET ITS RESULTS INTO AN ACTIONABLE PLAN COACHES CAN USE TO IMPROVE THE PROBABILITY OF THEIR TEAM WINNING GAMES.**
- PRESENTATION TO HUSKY ATHLETICS COACHING STAFF

PRIZES

WINNERS WILL RECEIVE:

- OPPORTUNITY TO SHOWCASE YOUR WORK TO THE HUSKY ATHLETICS COACHING STAFF FOR THE FOCAL SPORT OF THE SEMESTER.
- BEST PREDICTIVE MODEL EARNS THE PROFESSIONAL OPPORTUNITY TO WORK WITH THE COACHING STAFF IN THE FUTURE.
- CHANCES TO ATTEND AND PRESENT AT AI/TECH AND SPORTS ANALYTICS CONFERENCES.
- POTENTIALLY TICKETS TO MAJOR SPORTING EVENTS (STILL IN THE WORKS)
- CASH PRIZES (STILL IN THE WORKS)



TEAMS

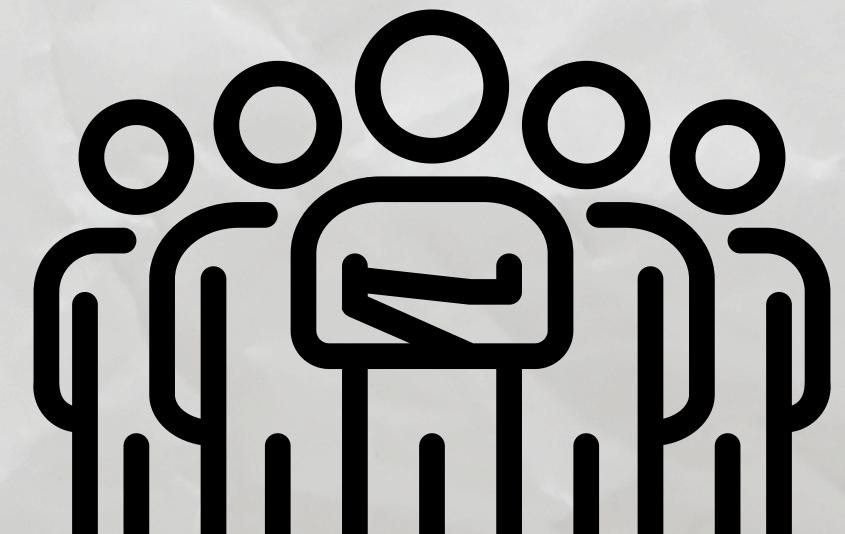


WORK IN TEAMS

- WE HIGHLY ENCOURAGE COLLABORATION AMONG PARTICIPANTS.

NETWORKING EVENT

- JOIN US FOR A NETWORKING EVENT NEXT WEEK TO CONNECT WITH YOUR FUTURE TEAM MEMBERS FOR THE SEMESTER.



TIMELINE

- **SEPTEMBER TO DECEMBER: ACTIVE COMPETITION MONTHS.**
 - BI-WEEKLY CHECK-IN MEETINGS MIXED WITH RELEVANT WORKSHOPS.
 - LIVE GAME ANALYSIS SESSIONS DURING HOME GAMES.
 - REGULAR LEADERBOARD UPDATES.
- **JANUARY TO MARCH: FINALIZATION.**
 - WIND DOWN ACTIVE DEVELOPMENT.
 - CONDUCT HEAD-TO-HEAD MODEL ACCURACY COMPETITIONS.
 - PREPARATION FOR FINAL PRESENTATIONS.



FORMAT AND EVALUATION

FORMAT & SUBMISSIONS

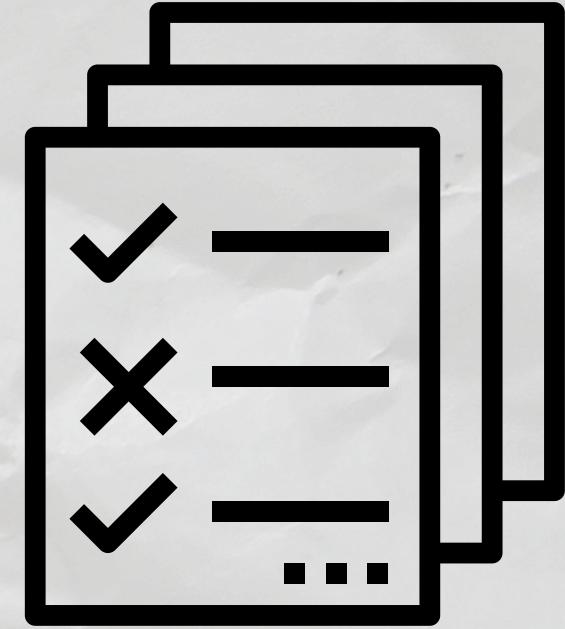
- SEASON-LONG COMPETITION
- WEEKLY PREDICTIONS OF NORTHEASTERN'S WIN PROBABILITY
- SUBMIT BEFORE LISTED START TIME OF FIRST GAME OF EACH GAMEWEEK
- LATE SUBMISSIONS: 50% DEFAULT PREDICTION

EVALUATION & SCORING

- LOG LOSS SCORING FOR ACCURACY
- WEEKLY LEADERBOARD UPDATES
- ADDITIONAL POINTS FOR MODEL EXPLORATION
- FINAL JUDGING: MODEL PERFORMANCE + 2-PAGE WRITE-UP

KEYRULES

- USE ONLY PUBLIC DATA
- NO SHARING OF MODELS OR RESULTS
- CONTINUOUS MODEL IMPROVEMENT
ENCOURAGED
- ACT PROFESSIONALLY AND ETHICALLY



THE FULL SET OF RULES WILL BE LOCATED IN A SHARED REPOSITORY

IMPORTANT NOTE

INCLUSIVITY OF SPORTS

- THE SPORT CHOSEN FOR EACH COMPETITION SHOULD NOT DETER PARTICIPATION.

TRANSFERABLE SKILLS

- PRINCIPLES GAINED IN SPORTS ANALYTICS ARE APPLICABLE ACROSS VARIOUS SPORTS.

VALUABLE EXPERIENCE

- REGARDLESS OF YOUR SPORT OF INTEREST, PARTICIPATING PROVIDES ESSENTIAL SKILLS FOR ANALYZING ANY SPORT YOU FIND ENGAGING.

ANY QUESTIONS?

THEME FOR THIS SEMESTER

**WOMEN'S ICE
HOCKEY**



NEXT MEETING

SPORTS ANALYTICS WORKSHOP

- FIRST WORKSHOP: MONDAY
SEPTEMBER 30, 5:30 PM, RB 409
- BASIC SPORTS DATA ANALYSIS AND
BUILDING GAME PREDICTION MODELS



LED BY DR. GERBER
PROFESSOR IN DATA SCIENCE AND
STATISTICS

AINU LINKTREE



**SPORTS
ANALYTICS
SLACK**



