

SCHEDULION

PROJECT PROPOSAL



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MOST VALUABLE PLAYERS



ANDREW

BACK-END ENGINEER
ARTIFICIAL INTELLIGENCE
MACHINE LEARNING

TIGERLILLY

FRONT-END ENGINEER



JOEY

ARTIFICIAL INTELLIGENCE
MACHINE LEARNING

NICK

BACK-END ENGINEER
ARTIFICIAL INTELLIGENCE
MACHINE LEARNING



OUR PROJECT

**Optimization
meets
probability
meets
constraint
satisfaction**

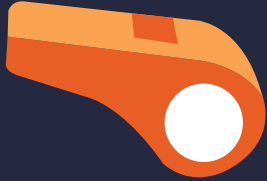
**Algorithms and
Artificial Intelligence
fans unite!**



A system that can
assist LMU's basketball
team and coaches in
**constructing the *best*
schedule of opponent
teams for LMU's
basketball season**

OUR PURPOSE

WINS



Provide LMU's basketball department with the resources to produce a schedule conducive to wins



QUALITY GAMES

Schedule opponents that ensure a strong strength of schedule by calculating the multivariable *NET* score



AUTOMATION

Automate a tedious task previously done by-hand and prone to human-error

N.E.T. RANKING

**TEAM VALUE
INDEX**

1

Takes into account opponent, location, and winner

**NET
EFFICIENCY**

2

A team's offensive efficiency minus its defense efficiency

**WINNING
PERCENTAGE**

3

Calculated by dividing a team's wins by its total games played

**ADJUSTED
WIN
PERCENTAGE**

4

A winning percentage that is weighted based on location and result

**SCORING
MARGIN**

5

A team's total points minus its opponent's points

PROJECT SCOPE



ALGORITHM

Form a model that produces the *NET* value, given the variables, past schedules, and raw data



MACHINE LEARNING

Produce a model that assigns a score to each opponent and computes strength of schedule for a given schedule



APPLICATION

A desktop application and schedule building platform to allow the LMU Athletics Department to login and create schedules conducive to wins



SCHEDULIONS

**THANK
YOU**

Any
Questions?

