

What started as a personal project a year ago to figure out if timeouts actually did anything has turned into the premier pickleball site for data analytics.

# Goal: To bring analytics into competitive pickleball.

#### **Target Audiences**

- **Players & Coaches** Use data to identify areas for improvement and to identify weaknesses in your opponent's game.
- Leagues & Tournaments Offer match analyses and performance metrics to competitors
- Fans Fans love stats, especially when betting is introduced.

# How does it work?

Amazon Lambda

Amazon SageMaker

processing.

python'

1. Data is collected by users via the Data Entry Tool\*

2. Data is extracted. transformed, and loaded into the pklmart database.

 Classification models use shot location and estimated speed to determine shot types and who hit each shot

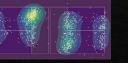
\*The Data Entry Tool is available as a web app and supports both standard and MLP rally scoring.

Stored in the pklmart as of Feb 2023:

> 48 matches 95 games 4,305 rallies 38,681 shots

The majority of actionable analytics require shot level data.

3. Data is used to generate reports and run analyses.



reports @ pklmart.com/reports

Check out all the existing match

# A proven strategy

Senior pros Chris Miller and John Sperling teamed up and had a clear gameplan with their thirds:

Drop to the left side player's backhand.

It worked. They went on to defeat Paul Olin and Dave Fleming 11-8, 11-7.

# Third Shot Performance

Player	Shot	Frequency	Error %	Win %
John Sperling	Drop	22	4.6%	59.1%
Chris Mills Miller	Drop	18	5.6%	44.4%
Dave Fleming	Drive	12	16.7%	66.7%
Dave Fleming	Drop	10	10.0%	10.0%
Paul Olin	Drop	9	22.2%	22.2%
Paul Olin	Drive	5	0.0%	60.0%
John <mark>Sperling</mark>	Drive	2	50.0%	0.0%
Chris Mills Miller	Drive	1	100.0%	0.0%

#### Ad hoc Analyses



Where should you be placing your return? Do timeouts actually do anything? Should you drive, or drop?



### So, what's counter play?

Hit more returns to the right side player. John and Chris were significantly less likely to win the rally if Chris hit the third.

The theory: Hitting a quality drop to that corner is significantly harder for the right side player (in this case, Chris), largely because he has a worse angle and increased net height.

# Current projects



**Player profiles** 

Summarize a player's tendencies by aggregating across several of their matches

All processing and report generation is hosted on AWS and utilizes serverless

aws

### Automation of Data Entry

Utilize computer vision to help automate portions of the data entry process, such as ball tracking

### Contact

www.pklmart.com @pklmart.analytics X pklmart.analytics@gmail.com (919) 649-9415