

# Investing in Hybrid Classifiers

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AutoTrack Feature Research



# Hello!

*I am Pedro Jofre Lora*

I am a member of the quantitative research team.  
You can find me @pjofrelora

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# Problem Statement

Decrease AutoTrack mistake rate



Misclassification



Fewer Features

1

# Problem Statement

Decrease AutoTrack mistake rate



Reduced  
Misclassification



More Features

2

# Business Value

Improved user experience



Happy User

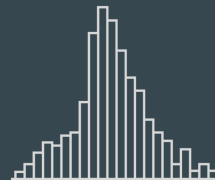
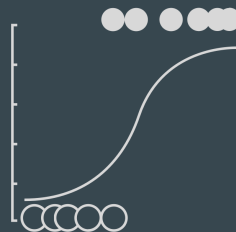
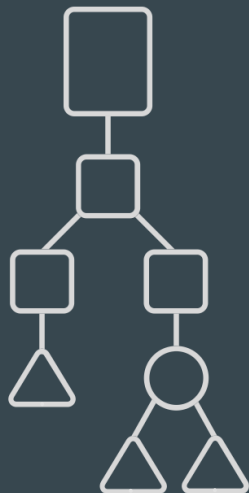


More Users  
More Activity

# 3

## Case Study

Classic Classifiers: 62%



# 3

## Case Study

Hybrid Classifier: 93%



# 4

## Recommendations

### Pilot Hybrid Classifier

- Allocate 4 weeks to develop hybrid classifier
- Select 5% of user base for 1 month pilot
- Monitor user satisfaction
  - Direct feedback
  - Time spent in app
  - Manual correction rate



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## Future Work

### Improve customer experience

- Collect data for 10 next-most-popular activities
- Modify current hybrid approach
- Optimize hybrid classifier