ETHICAL CONSIDERATIONS FOR PLAYER MODELING

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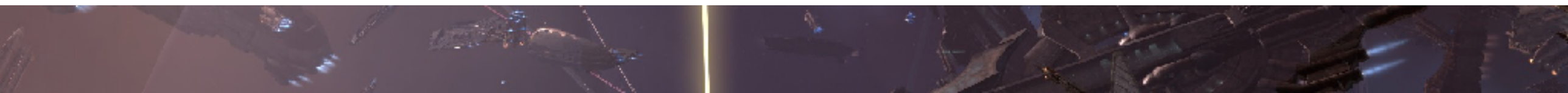

ETHICAL CONSIDERATIONS FOR PLAYER MODELING

- Ethics of Artificial Intelligence
- Ethics of Computer Games
- Ethical Challenges in Player Modeling
- Methods for Ethical Player Modeling

ETHICS OF ARTIFICIAL INTELLIGENCE

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Facebook

Facebook fires trending team, and algorithm without humans goes crazy

Module pushe… Coulter
headline and…

Racism is Poisoning Online Ad Delivery, Says Harvard Professor

Google searches involving black-sounding names are more likely to serve up ads suggestive of a criminal record than white-sounding names, says computer scientist

February 4, 2013

The first AI-judged beauty contest taught us one thing: Robots are racist

Machine Bias

There's software used across the country to predict future criminals. And it's biased against blacks.

by Julia Angwin, Jeff Larson, Surya Mattu and Lauren Kirchner, ProPublica
May 23, 2016

A major flaw in Google's algorithm allegedly tagged two black people's faces with the word 'gorillas'

Molly Mulshine
Jul. 1, 2015, 1:55 PM 15,177

News › World › Europe

Russian driver fined for his car's shadow

'Cameras want us to pay fines even if car shadows violate traffic rules'

Samuel Osborne | @SamuelOsborne93 | Sunday 4 September 2016 |
12 comments

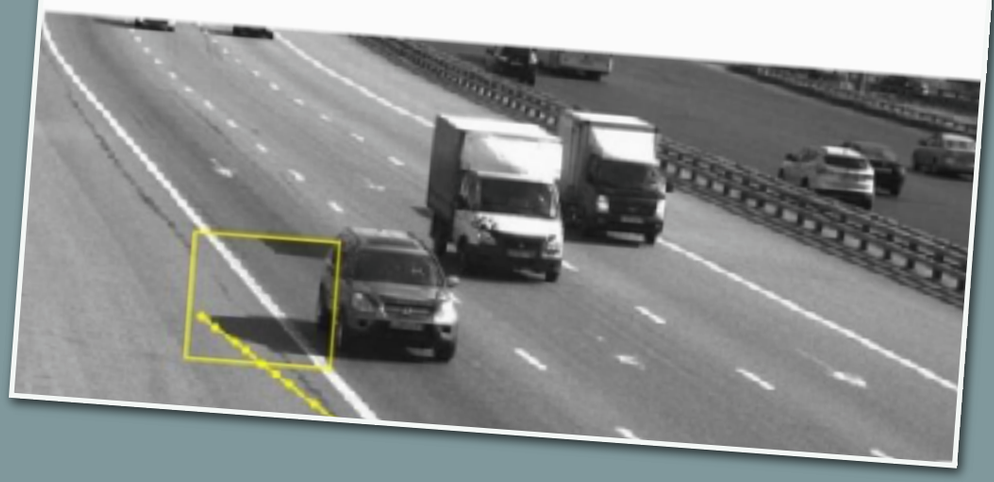


Image: hdwallpaperia.com

SOCIAL CRITERIA FOR AI

- Responsibility
- Transparency
- Auditability
- Incorruptibility
- Predictability

Bostrom and Yudkowsky, 2014.

ETHICS OF COMPUTER GAMES

Navid Nuur, Broken Circle , 2011.

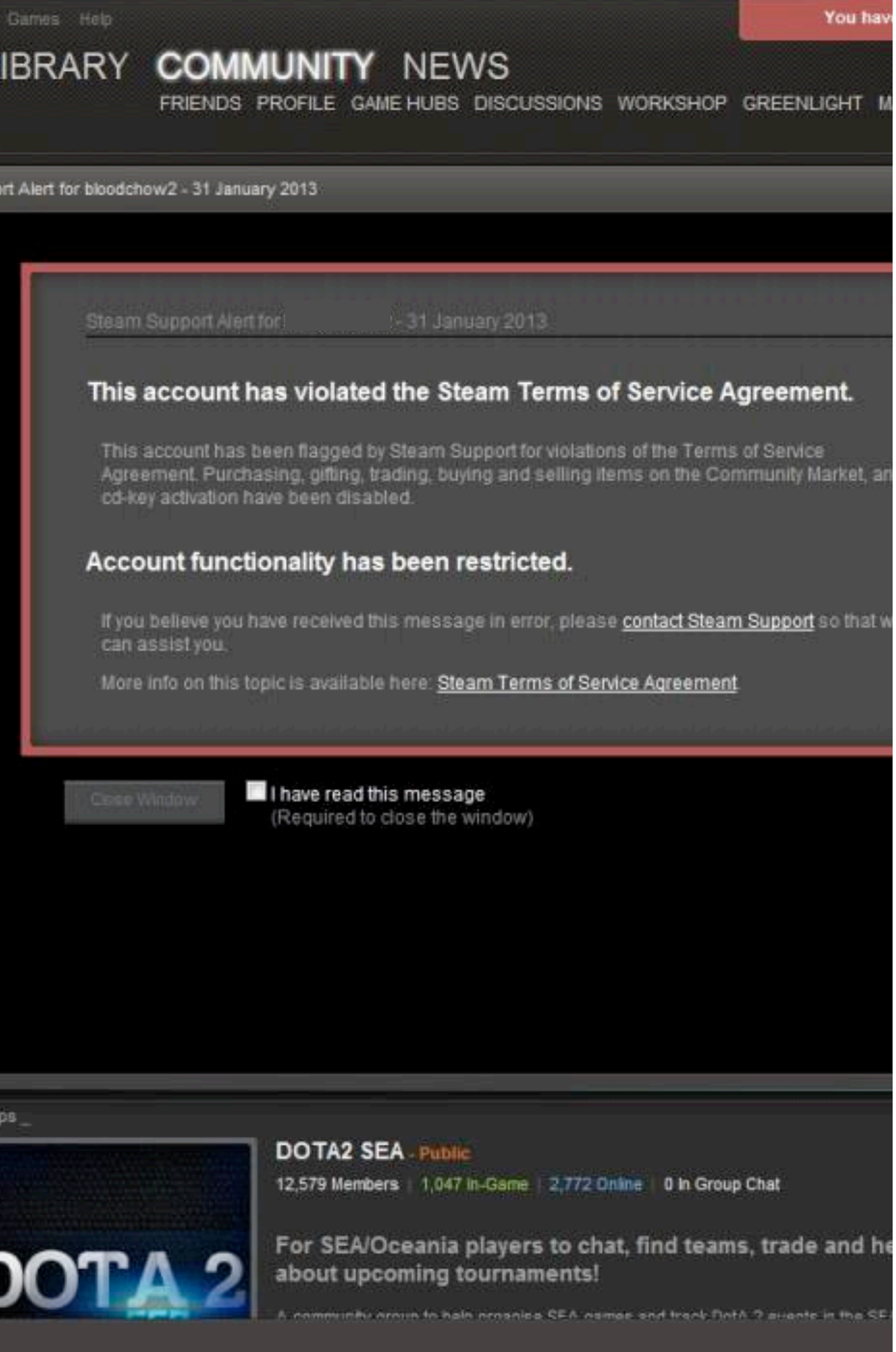
Eve Online

ETHICAL CHALLENGES IN PLAYER MODELING

Clash of Clans

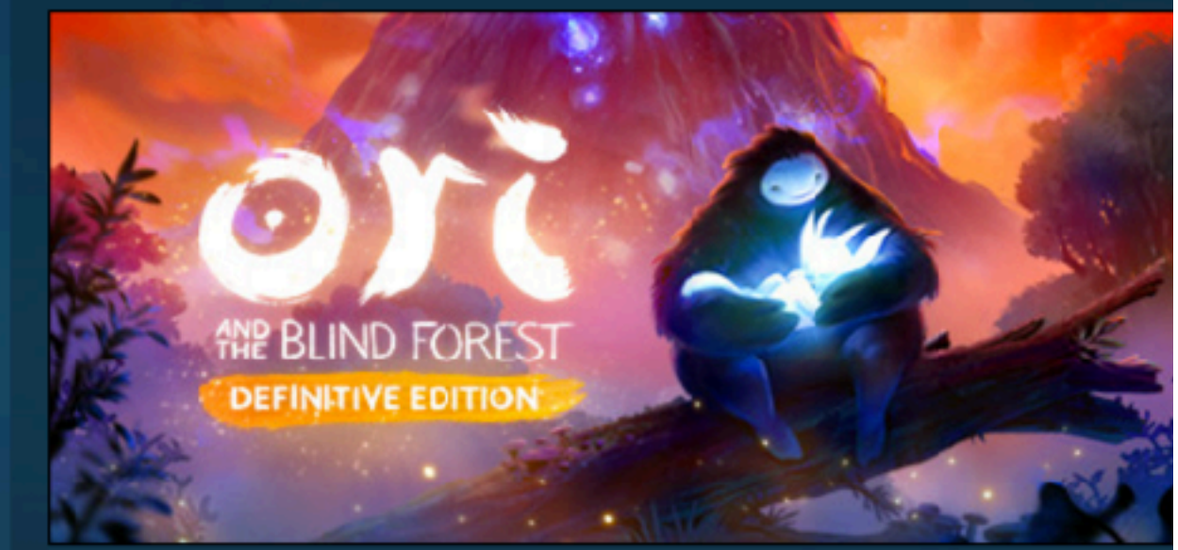
MONETIZATION & CHURN PREDICTION

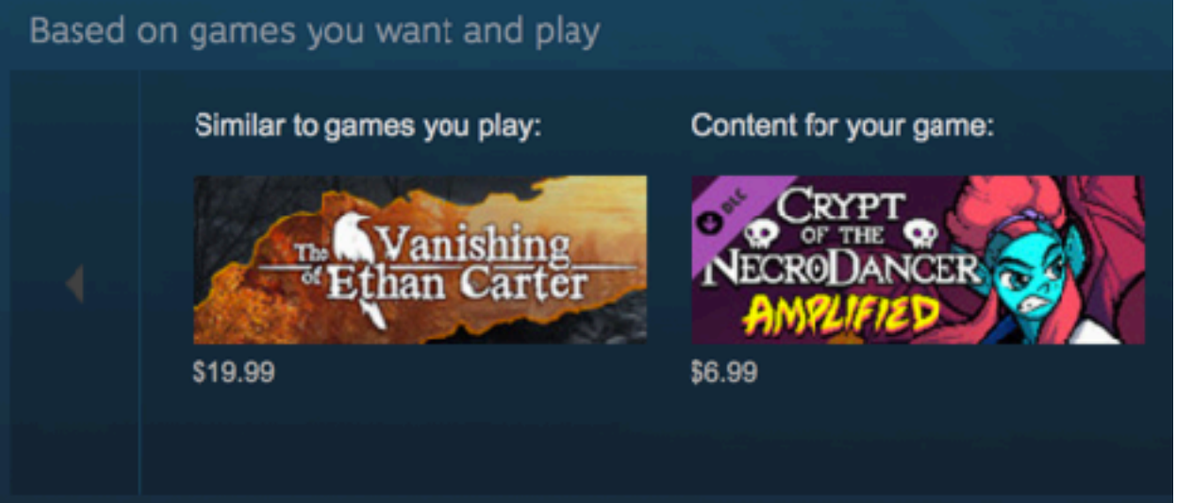
- Predicting player spending
- Interventions that retain players or make them spend money
- Lack transparency
- Need for regulation

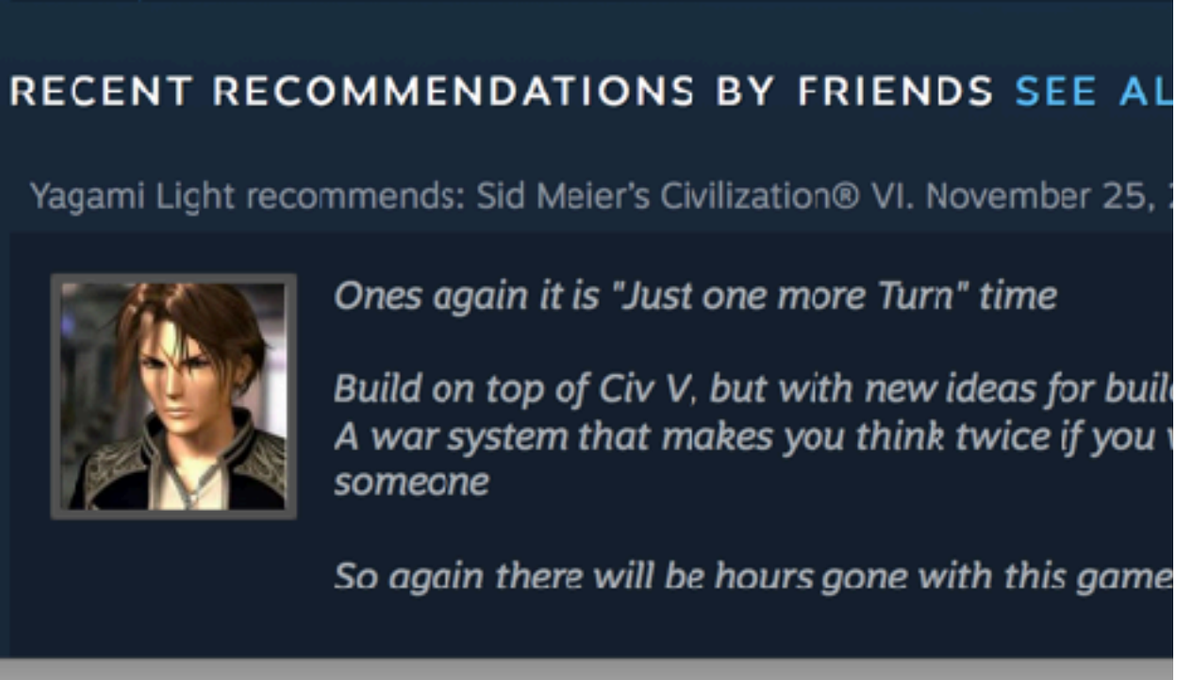


BANNING

- Nullifies players' investment
- Protects the player base
- Responsibility clear
- Transparency varies
- Auditable
- Often predictable







RECOMMENDER SYSTEMS

- Influences what
  - players are likely to experience
  - games are likely to be sold
- Outliners?
- Ownership of profile?
- Could encode purchasing power, class, race, sexuality, political orientation
- Somewhat transparent
- Susceptible to corruption

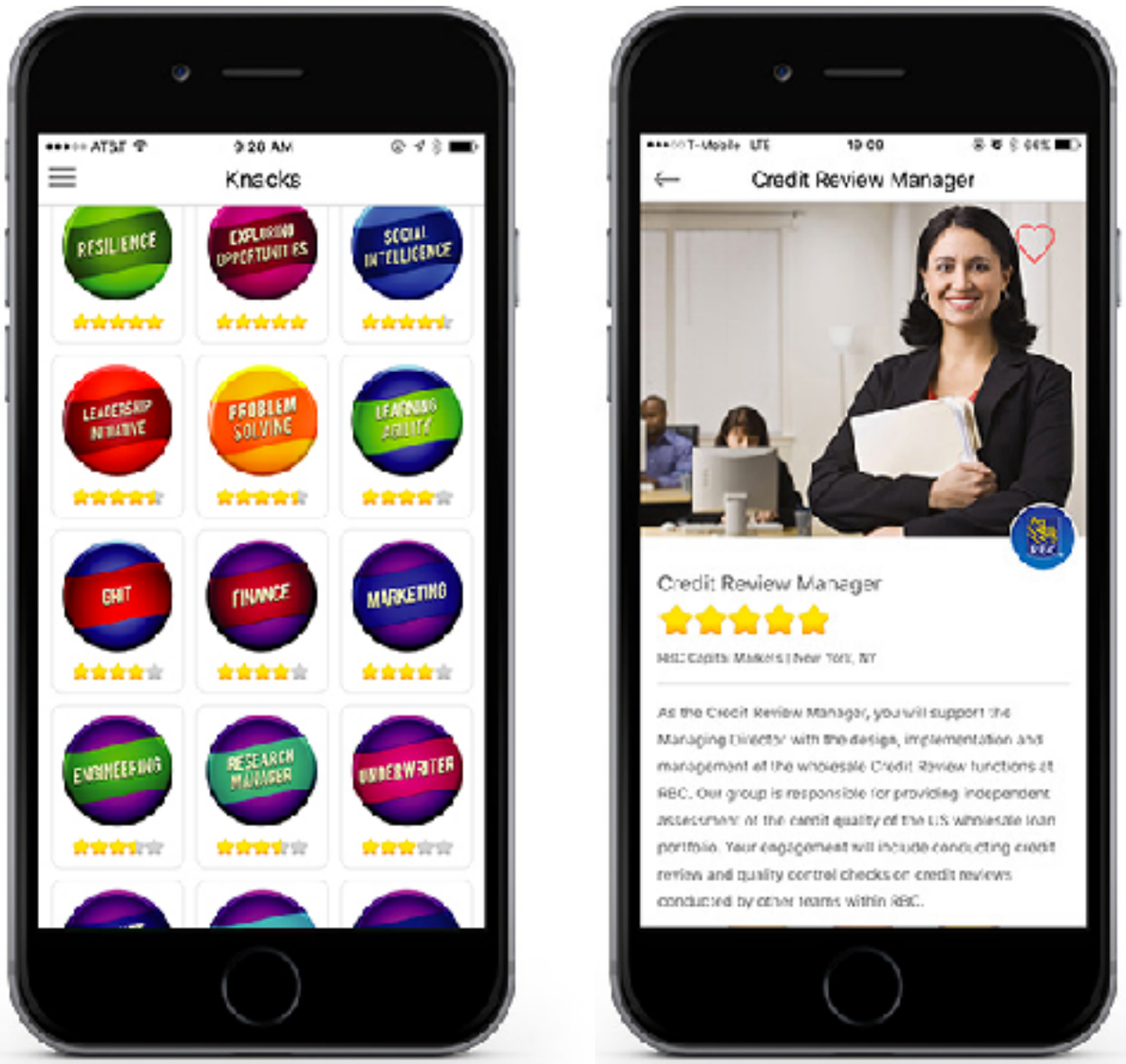
Forza Motorsport

GENERATIVE PLAYER MODELS

- Player models represent players
- A procedural counterpart to a photo, video, or audio recording
- Is the representation accurate?
- Who owns the player model?

PLAYER MATCHING

- Social feature
- Finds appropriate opponents or co-players
- Also controls who gets to meet who online
- Create filter bubbles



TRAINING AND ASSESSMENT

- Games turned into teaching or psychological testing
- Player models used to determine
  - training program
  - assessment scores
- Need for transparency
- Audibility
- Predictability

knack.it

Battlefield 3

PRIVACY

- Discernible from games:
  - Personality type
  - Life motives
  - Age
  - Nationality
- Lack of transparency
- Allow players to opt out

SUMMARY

- Player modeling is useful
- Generates new ethical challenges in games
- Games need to hide information from the player
- Games are experienced as separate from out-game
- Can have consequences for out-game life
- Living up to the social criteria of Bostrom and Yudkowsky we risk breaking the illusion and ruining the game

FIRST STEPS FOR ETHICAL PLAYER MODELING

- Consider worst-case impact of models on the players
- Increase the diversity of teams researching and implementing players models
- Conduct user-centred and participatory model design
- Make models transparent and communicate them to players
- Continuously audit models

THANKS!

questions?