



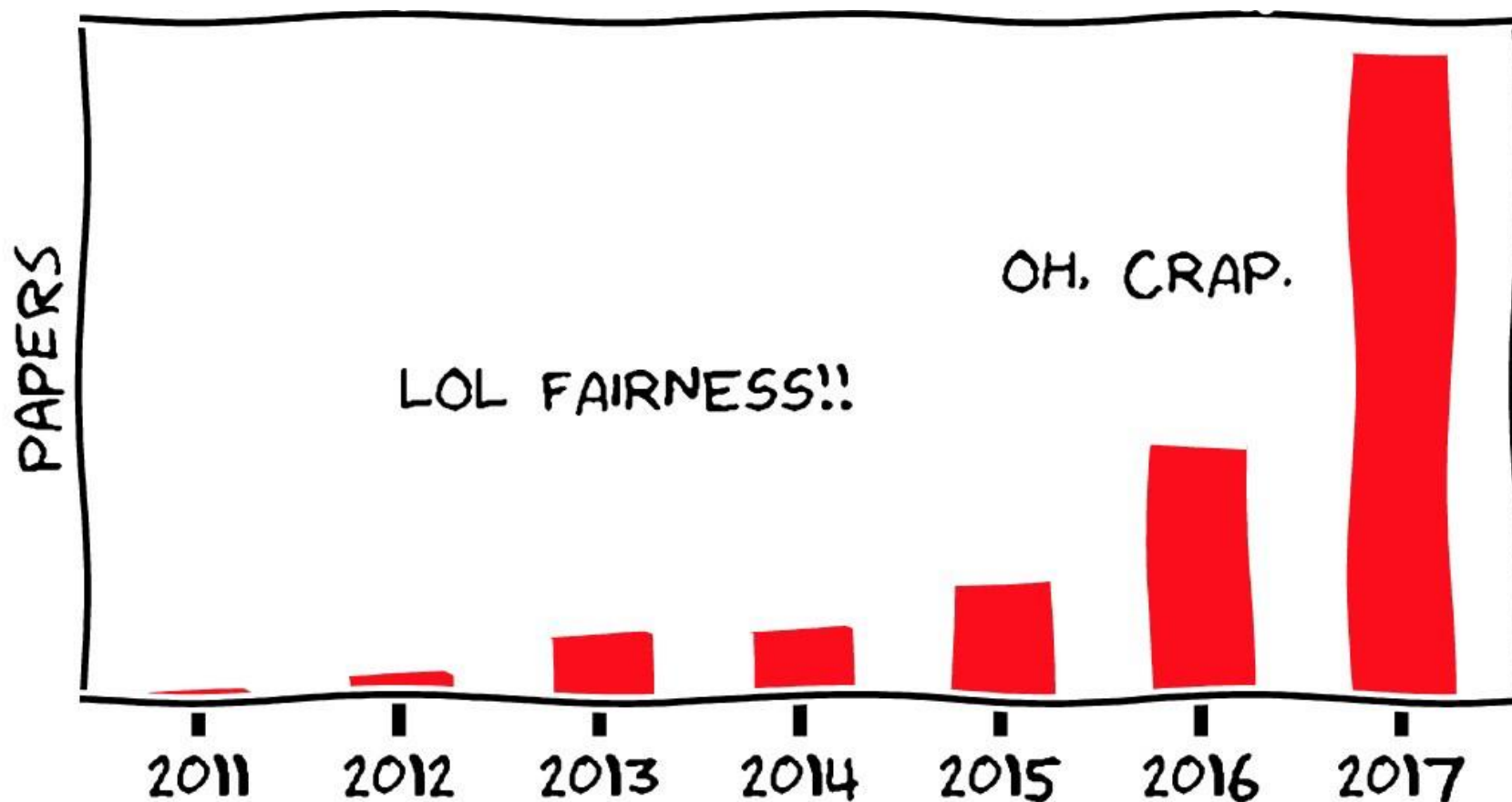
# Real-time Analytics for Internet of Sports

| *Marie Curie European Training Network*

## Poster Sneak Peek

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# A brief history of fairness research



# Is fairness a nice-to-have?

Beside damage reputation, **discrimination laws do not allow disparate treatment** based on attributes such as sex, race, religion, sexual identity, etc.:

Any **discrimination** based on any ground such as *sex, race, colour, ethnic or social origin, genetic features, language, religion or belief, political or any other opinion, membership of a national minority, property, birth, disability, age or sexual orientation* shall be **prohibited**.

- Article 21 of the Charter of Fundamental Rights

# Fairness research across domains

## Natural Language Processing



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## Computer Vision



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## Ubiquitous Computing

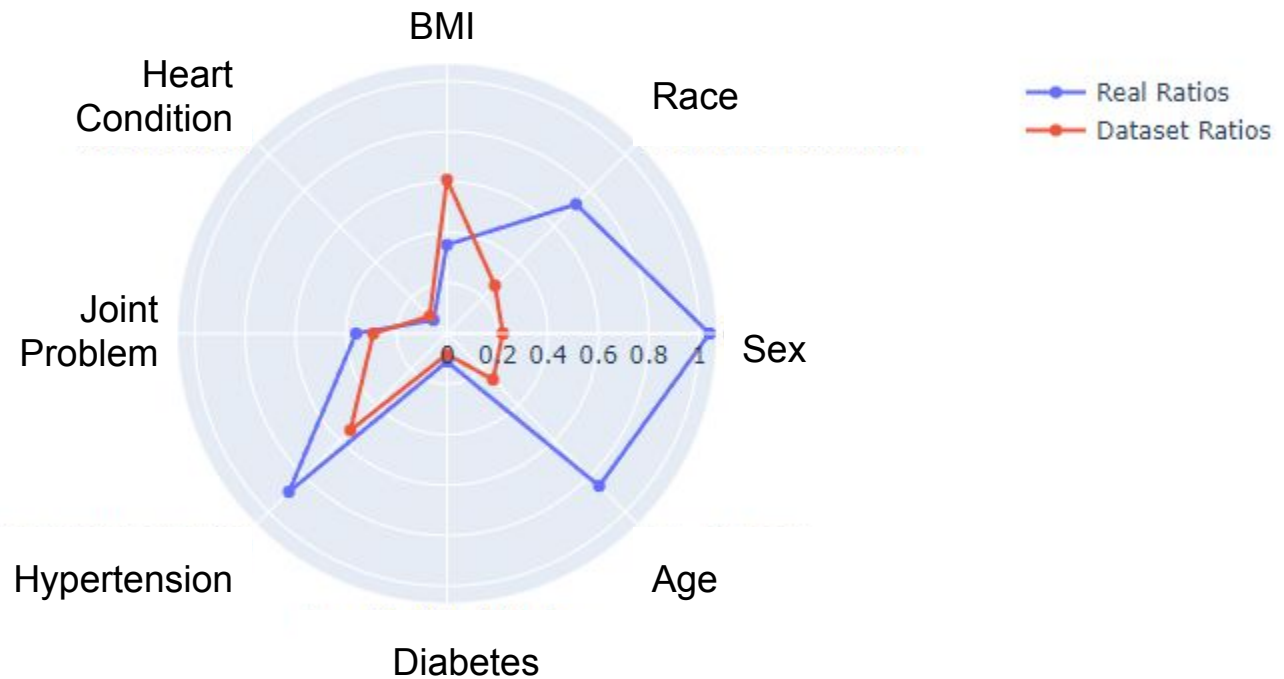


# Population-scale data



# Is the MyHeart Counts data biased?

Real vs Dataset Population Ratio Comparison (#Minority / #Majority class instances)





Does **ubiquitous computing**  
- data and models -  
suffer from **bias issues**?

# References

Hershman, Steven G., et al. "Physical activity, sleep and cardiovascular health data for 50,000 individuals from the MyHeart Counts Study." Scientific data 6.1 (2019): 1-10.

Image: <https://towardsdatascience.com/a-tutorial-on-fairness-in-machine-learning-3ff8ba1040cb?gi=a34042426193>

Image: <https://www.hiig.de/en/bias-in-natural-language-processing/>

Image: <https://www.codedbias.com/>

Image: <https://depositphotos.com/>

# Beneficiaries / Partners

## BENEFICIARIES



WEMEMOVE



## PARTNERS



# Acknowledgement



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