

# How smart does your profile image look? Estimating intelligence from social network profile images

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Can a user's intelligence be inferred from social network profile images?

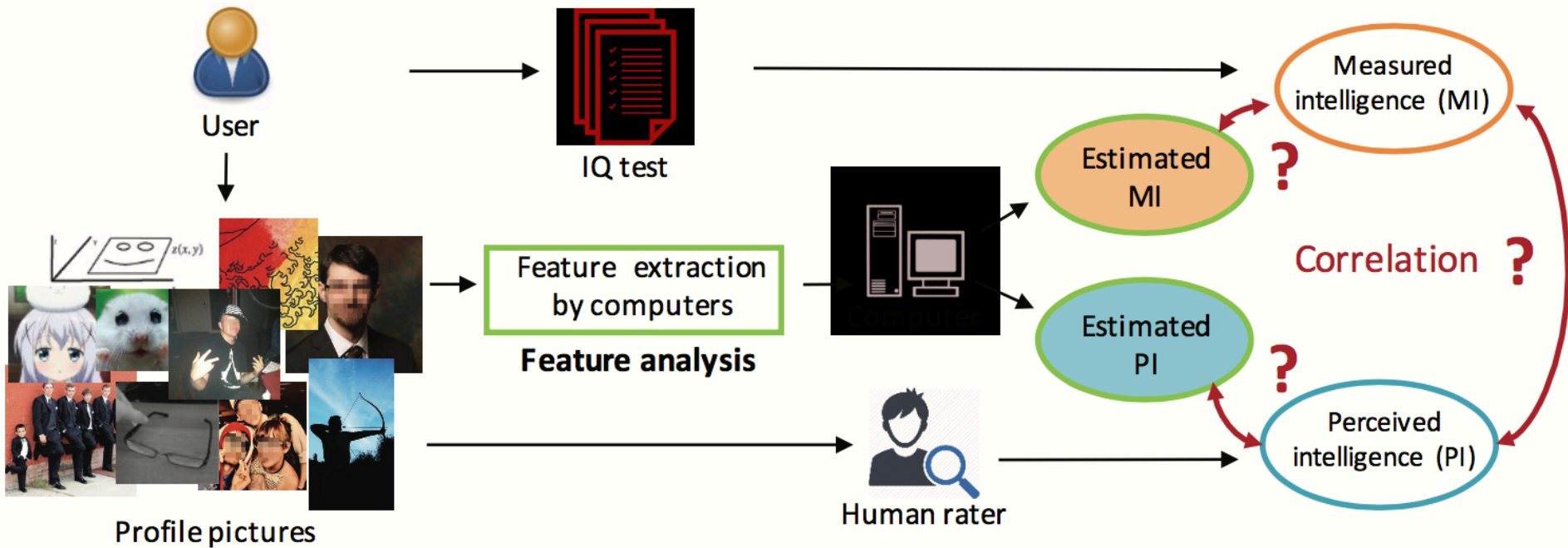
# Intelligence

Measured intelligence (MI)

Perceived intelligence (PI)

# Research questions

- Can humans make intelligence judgments for others from profile images ?
- Can computers make such judgments?
- What visual elements an intelligent person will use?
- What visual elements make a person perceived to be intelligent?



## myPersonality database

- 1,122 users took an IQ test and provided FB profile images
- 739 human raters rated the 1,122 images

# Research questions

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- We found different people have relatively consistent judgements and such judgements are associated with MI for both men and women

# Research questions

- Can computers make such judgments?
- We found that intelligence estimation from profile images is a difficult task even for humans, but it is possible to equal humans' accuracy using algorithms while also having the potential to reduce biased judgements.



# Research questions

- What visual elements an intelligent person will use?
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## High MI & high PI

- do not like to use the colour pink, purple or red, and images are usually less diversified in colour, more clear in texture, and contain less skin area

## High MI

- like to use the colour green, and have fewer faces, but this does not affect how others judge them

Intelligent people understand that a profile picture is most effective when it shows single person, captured in focus, and with an uncluttered background

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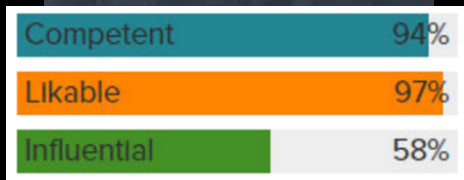
## Inaccurate stereotypes-correlated with PI but not MI:

- more grey and white, but less brown and green, with higher chromatic purity, smiling and wearing glasses, and faces at a proper distance from the camera, **make people look intelligent no matter how smart they really are**

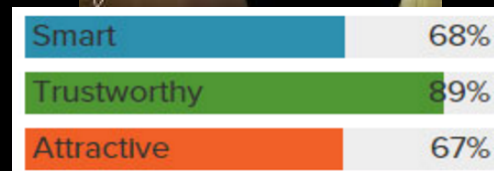
# Possible application



Nice pic!  
Put it in your CV!



Hot pic! Put  
it in dating  
app!



# Come to see my poster and ask questions !

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