



Facial Recognition Survey

Facial recognition is a biometric software application capable of uniquely identifying or verifying a person by comparing and analyzing patterns based on the person's facial contours. In this survey, we want to assess the general public's attitude and perceptions of facial recognition technology applied to surveillance cameras. Your participation in this survey is very important to us. All of your answers are confidential and will be used strictly for education research. There will be no sales or marketing follow-up because of your participation in this survey. This survey is being administered for a master thesis research on Vrije Universiteit Amsterdam and Universiteit Van Amsterdam. This survey will run from October 23, 2019, until November 6, 2019. It will take approximately 8 minutes to complete. If you have any questions or comments about this survey, you may enter them into the form at the bottom of the survey or e-mail them to Chao Zhang at yellywong7@gmail.com.

Basic information questions:

| 1. | What is your age range? _* |
|----|--|
| | O 18 - 30 |
| | ○ 31 - 40 |
| | O 41 - 50 |
| | O 51 - 60 |
| | O 61 - 70 |
| | ○ Over 70 |
| 2. | What is your gender? • |
| | ○ Male |
| | ○ Female |
| | ○ Prefer not to say |
| 3. | What is your education level?* |
| | O Primary education |
| | ○ Secondary education |
| | ○ Bachelor or equivalent |
| | O Master or equivalent |
| | O Doctor or equivalent |
| | Other (please specify) |
| 4. | In which country have you lived most of your life?* |
| | O United States |
| | ○ United Kingdom |
| | ○ China |
| | ○ Netherlands |
| | Other (please specify) |
| 5. | Which of the following categories best describes the industry you primarily work in? |
| | ○ Computer science & IT |
| | ○ Engineering & Technology |
| | ○ Education & Training |
| | O Government & Public officer |
| | O Business & Finance & Insurance |

| O Journalism & Media |
|---|
| O Arts & Entertainment & Recreation |
| ○ Law & Legal services |
| O Medicine & Health care & Social assistance |
| O Agriculture & Forestry & Fishing & Hunting & Mining & Real Estate |
| O Homemaker & Freelancer |
| ○ Retired & Unemployed |
| ○ Prefer not to say |
| Other (please specify) |

Objective judgment questions:

| 6. | How well do you understand the "facial recognition" concept? * | | | | |
|----|--|--|--|--|--|
| | (Facial recognition is a category of biometric software that maps an individual's facial features | | | | |
| | mathematically and stores the data as a faceprint. The software uses deep learning algorithms to | | | | |
| | compare a live capture or digital image to the stored faceprint in order to verify an individual's identity. | | | | |
| | ○ Very well | | | | |
| | ○ Somewhat | | | | |
| | ○ Neutral | | | | |
| | ○ Know about but don't understand | | | | |
| | O Never heard about it | | | | |
| 7. | From what sources has your knowledge about facial recognition technology come? | | | | |
| | (Please select all that apply) | | | | |
| | ☐ Print media | | | | |
| | ☐ Internet | | | | |
| | ☐ Scientific articles/journals | | | | |
| | ☐ Conversations with others | | | | |
| | ☐ Class at school/university | | | | |
| | ☐ Other (please specify) | | | | |
| 8. | What security measure(s) would you use to unlock your mobile phone? | | | | |
| | (Select all that apply) | | | | |
| | □ Swipe | | | | |
| | □ Passwords | | | | |
| | □ Pattern recognition | | | | |
| | ☐ Finger prints | | | | |
| | □ Face ID | | | | |
| | ☐ I do not use any security measures | | | | |
| | □ Other (please specify) | | | | |
| 9. | What would be the primary reason for you to use FaceID to unlock your mobile | | | | |
| | phone?* | | | | |
| | ○ More accurate | | | | |
| | ○ More reliable | | | | |
| | ○ More secure | | | | |

| ○ Faster |
|--|
| ○ Easier |
| ○ I am not sure |
| ○ None of the above |
| Other (please specify) |
| 10. What would be the primary reason for you to NOT use FaceID to unlock your mobile |
| phone? * |
| ○ Less accurate |
| ○ Less reliable |
| ○ Less secure |
| ○ Slower |
| O More difficult |
| ○ I am not sure |
| ○ None of the above |
| Other (please specify) |
| 11. How knowledgeable are you about the usage of facial recognition technology by |
| your country's government? * |
| ○ Very knowledgeable |
| ○ Somewhat knowledgeable |
| ○ Neutral |
| ○ Slightly knowledgeable |
| O Not knowledgeable at all |
| 12. How much do you agree with the statement: "The public should be given the |
| opportunity to consent or opt out of being subjected to facial recognition |
| technology"?• |
| ○ Strongly agree |
| ○ Agree |
| ○ Neutral |
| ○ Disagree |
| ○ Strongly disagree |

| 13. | 13. On a scale of 1 to 5, where 1 is not at all and 5 is very strongly, how strongly do you | | | | |
|--|---|----------------|----------------|-------------------|--------------------------|
| | feel that use of facia | al recognitio | n on surveilla | nce cameras is | an invasion of your |
| | privacy? * | | | | |
| | ○ 1 (not at all) | | | | |
| | O 2 | | | | |
| | ○ 3 | | | | |
| | O 4 | | | | |
| | ○ 5 (very strongly | ') | | | |
| | | | | | |
| 14. | How much do you a | agree the fo | llowing purpos | ses of using fac | cial recognition |
| | technology?* | | | | |
| 1) | By police in crimina | ıl investigati | on | | |
| | OStrongly agree | OAgree | ○Neutral | ODisagree | OStrongly disagree |
| 2) | By police in their da | ay to day po | licing | | |
| | OStrongly agree | OAgree | ○Neutral | ODisagree | OStrongly disagree |
| 3) | On smartphones, to | allow a ph | one to 'unlock | d' in response to | the owner's face |
| | OStrongly agree | OAgree | ○Neutral | ODisagree | OStrongly disagree |
| 4) | In airports security | checkpoint | | | |
| | OStrongly agree | OAgree | ○Neutral | ODisagree | OStrongly disagree |
| 5) | In supermarkets to | verify wheth | ner someone i | s old enough to | buy alcohol |
| | OStrongly agree | OAgree | ○Neutral | ODisagree | OStrongly disagree |
| 6) | 6) In supermarkets to track shopper behaviour around the store and target products at | | | | e and target products at |
| | shoppers | | | | |
| | OStrongly agree | OAgree | ○Neutral | ODisagree | OStrongly disagree |
| 7) | In schools to registe | er pupils and | d check attend | dance | |
| | OStrongly agree | OAgree | ○Neutral | ODisagree | OStrongly disagree |
| 8) | In schools to monito | or pupils' ex | pressions and | l behavior | |
| | OStrongly agree | OAgree | ○Neutral | ODisagree | OStrongly disagree |
| 9) | In schools to preven | nt non-stude | ents from ente | ering campus | |
| | OStrongly agree | OAgree | ○Neutral | ODisagree | OStrongly disagree |
| 10) | On public transport | to let paying | g customers tl | hrough ticket ba | arriers |
| | OStrongly agree | OAgree | ○Neutral | ODisagree | OStrongly disagree |
| 11) | On public transport | to identify p | ersons of inte | erest for the pol | ice |
| | OStrongly agree | ○Agree | ○Neutral | ODisagree | OStrongly disagree |
| 12) At work to ensure workers do not enter unauthorised or high risk areas (e.g. | | | | | |
| | construction zones) |) | | | |

| OStrongly agree | ○Agree | ○Neutral | ODisagree | OStrongly disagree |
|-------------------------|----------------|-----------------|-------------------|----------------------------|
| | | | | s when hiring for a job |
| OStrongly agree | OAgree | ○Neutral | ODisagree | ○Strongly disagree |
| 14) Events where mas | | | _ | _ |
| OStrongly agree | OAgree | ○Neutral | ODisagree | OStrongly disagree |
| 15) In apartment buildi | _ | • | | |
| ○Strongly agree | ○Agree | ○Neutral | ODisagree | ○Strongly disagree |
| 15.On a scale of 1 to | 5, where 1 is | s very comfort | able and 5 is n | ot at all comfortable, how |
| comfortable are yo | u with the po | olice using fac | cial recognition | technology? * |
| O 1 (very comfort | able) | | | |
| O 2 | | | | |
| ○ 3 | | | | |
| O 4 | | | | |
| ○ 5 (not at all cor | nfortable) | | | |
| 16. Do you agree that | nolice shoul | d use facial re | ecognition techn | nology to better serve the |
| public? * | police oriodi | a abo labiai re | oogriidon toorii | lology to better serve the |
| ○ Strongly agree | | | | |
| O Agree | | | | |
| ○ Neural | | | | |
| ○ Disagree | | | | |
| ○ Strongly disagr | ree | | | |
| | | | | |
| 17. Reasons for agree | | ce use of facia | al recognition te | echnology: * |
| (Please select all t | hat apply) | | | |
| ☐ It is beneficial f | or the securi | ty of society | | |
| ☐ It is beneficial f | or my persoi | nal security | | |
| ☐ It enhances exi | sting securit | y systems e.g | . CCTV and oth | ners |
| ☐ I can opt out or | consent | | | |
| ☐ I trust them to u | ise the techr | nology ethical | ly | |
| ☐ It will not be mis | sused or had | cked | | |
| ☐ It is indiscrimina | ate e.g. by ra | ace and gende | er | |
| ☐ It is accurate | | | | |
| ☐ It is reliable | | | | |
| ☐ It does not affect | ct me persor | nallv | | |

| | ☐ I do not know |
|-----|---|
| | ☐ None of the above |
| | ☐ Other (please specify) |
| | |
| | |
| 18. | Reasons for disagreeing with police use of facial recognition technology: |
| | (Please select all that apply) |
| | ☐ It infringes on the privacy of people in society |
| | ☐ It normalises surveillance |
| | ☐ I can't opt out or consent |
| | ☐ I do not trust them to use technology ethically |
| | ☐ It infringes on my personal privacy |
| | ☐ It will be misused or hacked |
| | ☐ It can be used to discriminate e.g. by race and gender |
| | ☐ It is not accurate |
| | ☐ It is not reliable |
| | ☐ It affects me personally |
| | ☐ I do not know |
| | ☐ None of the above |
| | ☐ Other (please specify) |
| | |

Subjective judgement questions:

| cameras in your city? |
|--|
| O Yes |
| ○ No |
| ○ I am not sure |
| O Familiot Sure |
| 20. Do you agree that the use of facial recognition technology can help identify criminals |
| more efficiently in your city? * |
| ○ Strongly agree |
| ○ Agree |
| ○ Neutral |
| ○ Disagree |
| ○ Strongly disagree |
| |
| 21. Do you agree that the facial recognition technology can help prevent crimes from |
| occurring in your city? |
| ○ Strongly agree |
| ○ Agree |
| ○ Neutral |
| ○ Disagree |
| ○ Strongly disagree |
| |
| 22. Do you agree that the use of facial recognition technology will deter terrorists in your |
| city? • |
| ○ Strongly agree |
| ○ Agree |
| ○ Neutral |
| ○ Disagree |
| ○ Strongly disagree |
| 23. Do you agree with using facial recognition technology as evidence to bring criminals |
| to justice? • |
| ○ Strongly agree |
| O Agree |

| ○ Neutral |
|--|
| ○ Disagree |
| ○ Strongly disagree |
| |
| 24. Do you believe that the government will use facial recognition technology without |
| notifying the public? * |
| ○ Strongly believe |
| ○ Believe |
| ○ Neutral |
| ○ Disbelieve |
| O Strongly disbelieve |
| |
| 25. How has learning more about facial recognition technology affected your opinion |
| toward its use?* |
| ○ I am now much more supportive of using facial recognition technology |
| O I am now somewhat more supportive of using facial recognition technology |
| O It had no affect |
| \bigcirc I am now somewhat less supportive of using facial recognition technology |
| O I am now much less supportive of using facial recognition technology |
| 26. Do you believe that facial recognition technology will be more widely used in the next |
| 10 years?* |
| ○ Strongly believe |
| ○ Believe |
| ○ Neutral |
| ○ Disbelieve |
| O Strongly disbelieve |
| |
| 27. Please list any additional comments you would like to share here: |
| |
| |
| |

Note: Thanks for taking the time to complete this survey. Your response is valuable for our research.