

Appendix F: Yoti LTD's Response to ICO Opinion on Age Assurance

Yoti

[Yoti response to ICO Opinion on Age Assurance](#)

Within their response to the ICO Opinion in Q4 of 2021, **Yoti** submitted the following:

[Facial Age Estimation \[white paper\]](#)

- Yoti strongly disagrees with the ICO's statement of its guidance that AI algorithms provides "little evidence for the effectiveness and accuracy of these emerging approaches."
- Data used from the most up to date Yoti research presents the following range surrounding various facial skin tones and ages in their facial recognition software:
 - 6-year-old avg MAE of 1.40 creates a range of 4 $\frac{3}{4}$ to 7 $\frac{1}{4}$ years old.

§ This variance represents a nearly 28%
 - 13-year-olds MAE of 2.33 creates a between ages of 10 $\frac{3}{4}$ yrs. to 15 $\frac{1}{2}$ years

§ This variance represents a nearly 17%
 - 18-year-old MAE of 1.31 creates a range of between 16 $\frac{1}{2}$ to 19 $\frac{1}{2}$ years

§ This variance represents a nearly 7%
 - 21 years old MAE of 2.31 creates a range of 18 $\frac{1}{2}$ to 23 $\frac{1}{2}$

§ This variance represents a nearly 11%
- While leading the industry in age-verification, this data suggests that we remain far from perfect when children could be placed into different age-appropriate categories
- **It is therefore the assessment of this author that facial recognition is INSUFFICIENT as a reliable rating form of Age Assurance. The disparities are too large given the calculations from Yoti's own research.**