



Strategies to Detect Fake Imagery Online

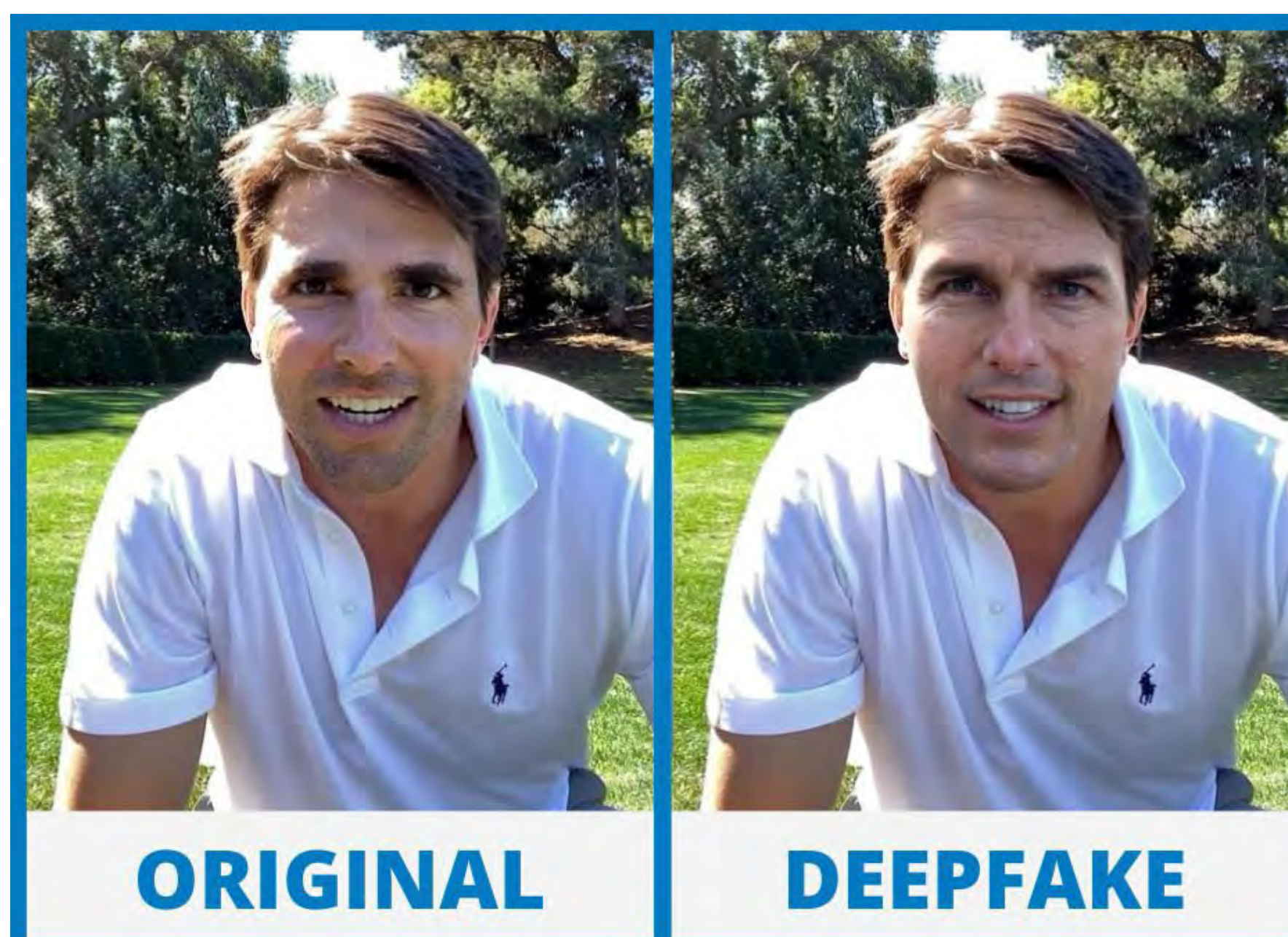
Anna Cardoso Rebelo at California State Polytechnic University, Pomona

ABSTRACT

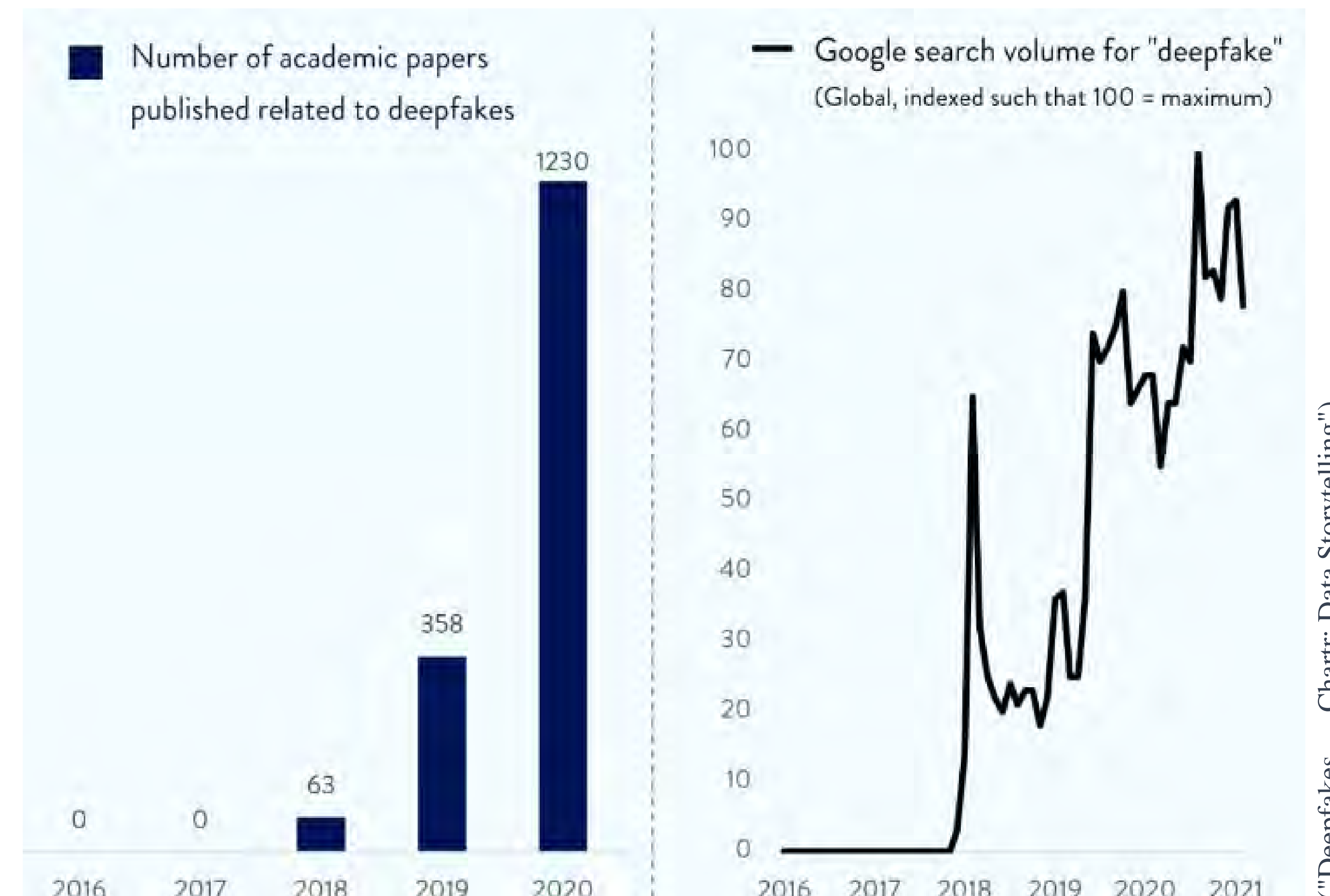
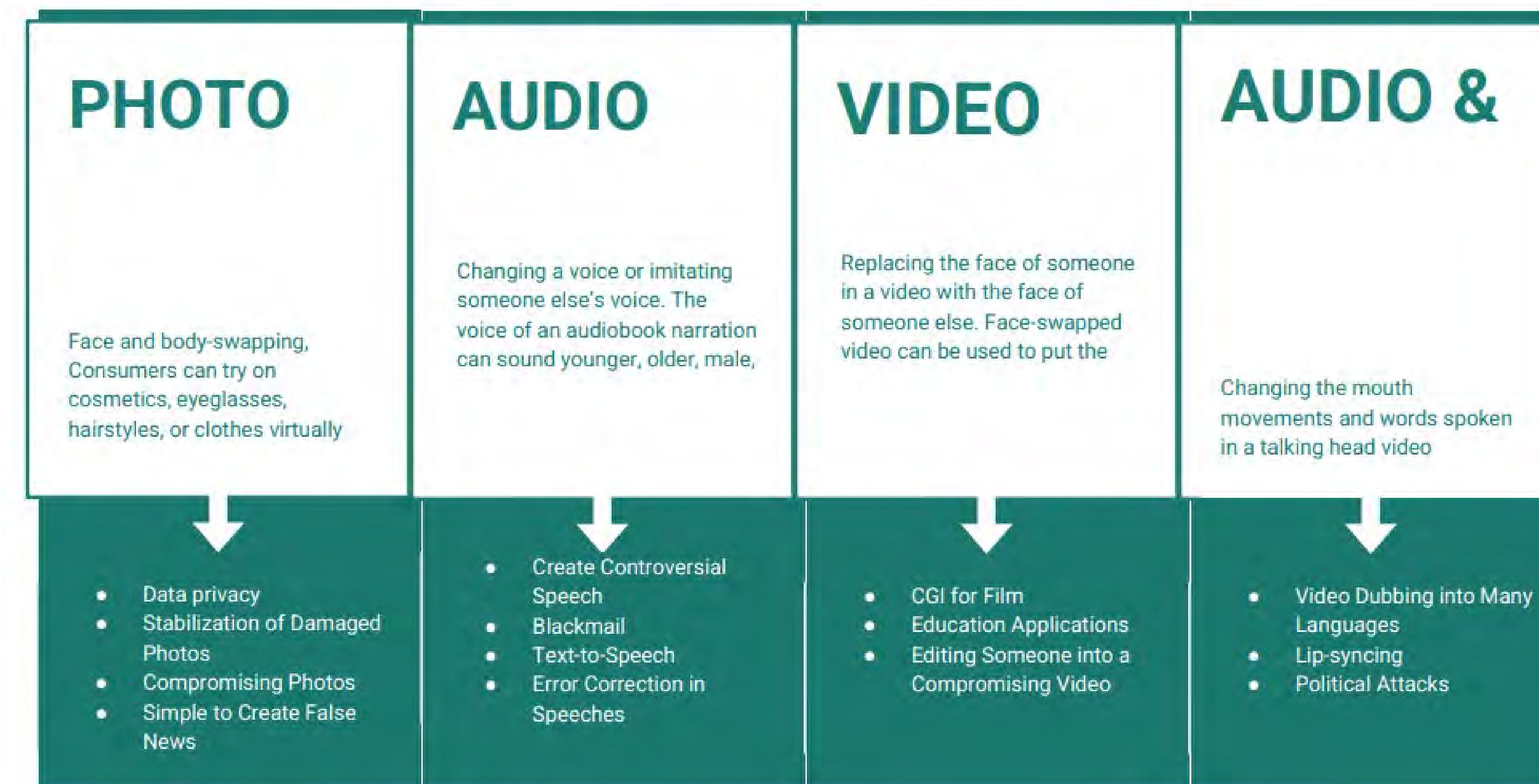
The rise of deepfake technology sparks concerns about digital content integrity and authenticity. This research explores the topic of deepfakes, which are artificially created multimedia content that can deceive viewers by appearing authentic. Deepfakes can involve imagery distortion by manipulating facial expressions, lip-syncing, or replacing faces within videos. It also aims to address the challenge of detecting deepfakes by surveying and discussing the methods proposed in the literature. It covers topics related to image analysis, computer vision, and the application of deep learning techniques to identify visual artifacts and anomalies indicative of deepfake manipulation.

METHODS ATTEMPTED

Research focuses on detecting GAN-generated faces via Deep Learning, Physical-Based, Physiological-Based, and Human Performance Comparison methods, emphasizing the need for robust detection tools while acknowledging challenges. The methodology employed in this paper appears to be a survey and literature review. The authors review algorithms used for creating deepfakes and methods proposed for detecting them. They analyze existing research and literature in the field of deepfakes, discussing different approaches and techniques. The purpose of the study is to provide a comprehensive overview of deepfake.



("Are Deep Fakes All Evil when They Can Be Used for Good? - Video Personalization | Personalized Video Email Marketing | Maverick Videos")



CONCLUSION

This project does not explicitly mention specific results of the survey. However, it suggests that the study provides a comprehensive overview of deepfake techniques, discusses the challenges and trends in the field, and presents methods proposed for detecting deepfakes. The paper presents findings and analysis based on the reviewed literature, highlighting the current state of deepfake creation and detection methods.

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Alternate Text

Anna Cardoso Rebelo

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'Deepfake Detection: Strategies to Detect Fake Imagery Online'

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Research focuses on detecting GAN-generated faces via Deep Learning, Physical-Based, Physiological-Based, and Human Performance Comparison methods, emphasizing the need for robust detection tools while acknowledging challenges. The methodology employed in this paper appears to be a survey and literature review. The authors review algorithms used for creating deepfakes and methods proposed for detecting them. They analyze existing research and literature in the field of deepfakes, discussing different approaches and techniques. The purpose of the study is to provide a comprehensive overview of deepfake.

Picture titled:

("Are Deep Fakes All Evil when They Can Be Used for Good? -Video Personalization | Personalized Video Email Marketing | Maverick Videos")

Graphic with "Photo, Audio, Video, Audio &"

Charts labeled: "Number of academic papers published related to deepfakes" and "Google search volume for 'deepfake'"

Conclusion: This project does not explicitly mention specific results of the survey. However, it suggests that the study provides a comprehensive overview of deepfake techniques, discusses the challenges and trends in the field, and presents methods proposed for detecting deepfakes. The paper presents findings and analysis based on the reviewed literature, highlighting the current state of deepfake creation and detection methods.

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