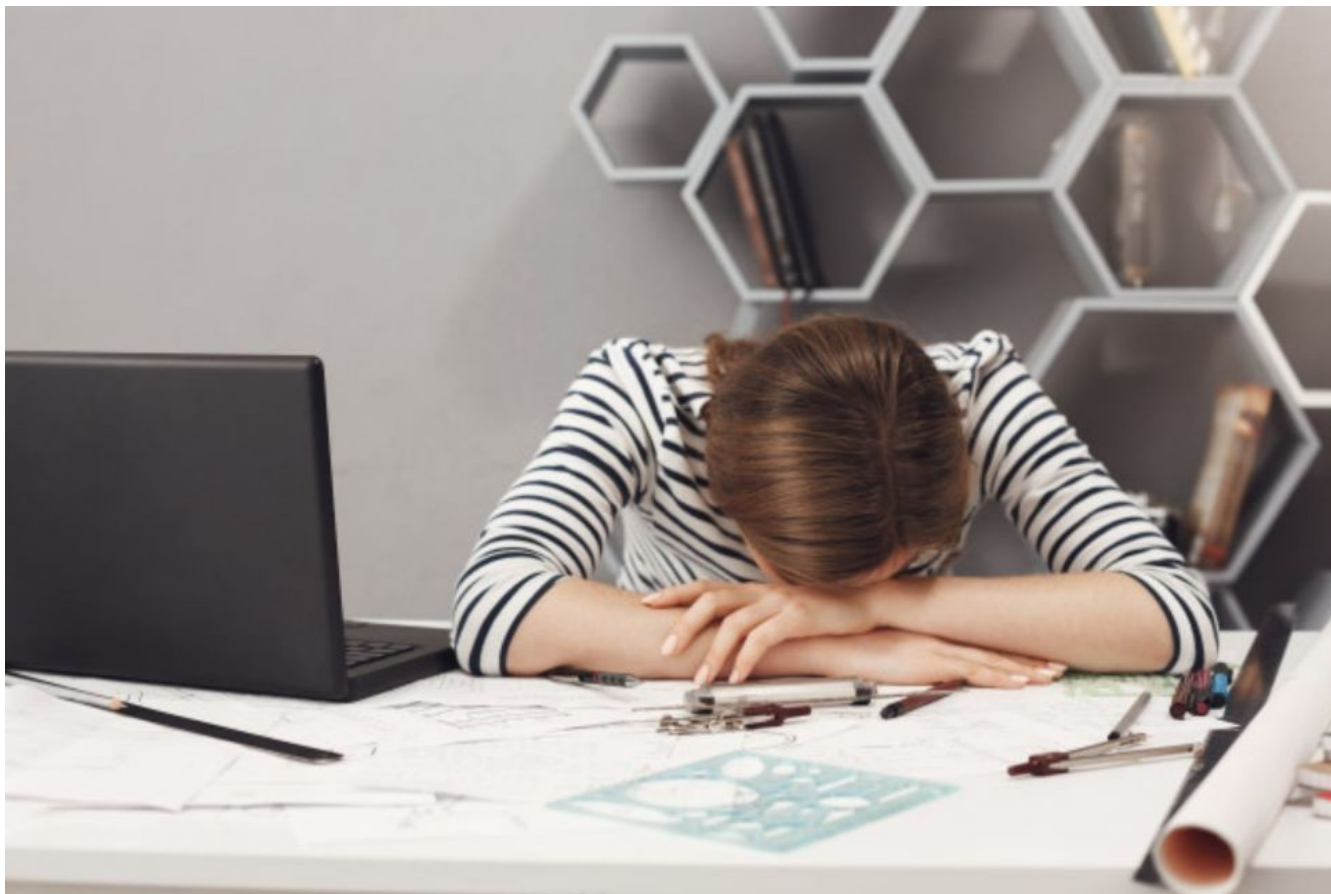




Source: <https://www.vertigopolitico.com/bienestar/salud/notas/aislamiento-social-afecta-el-estado-animico-en-tiempos-de-home-office>

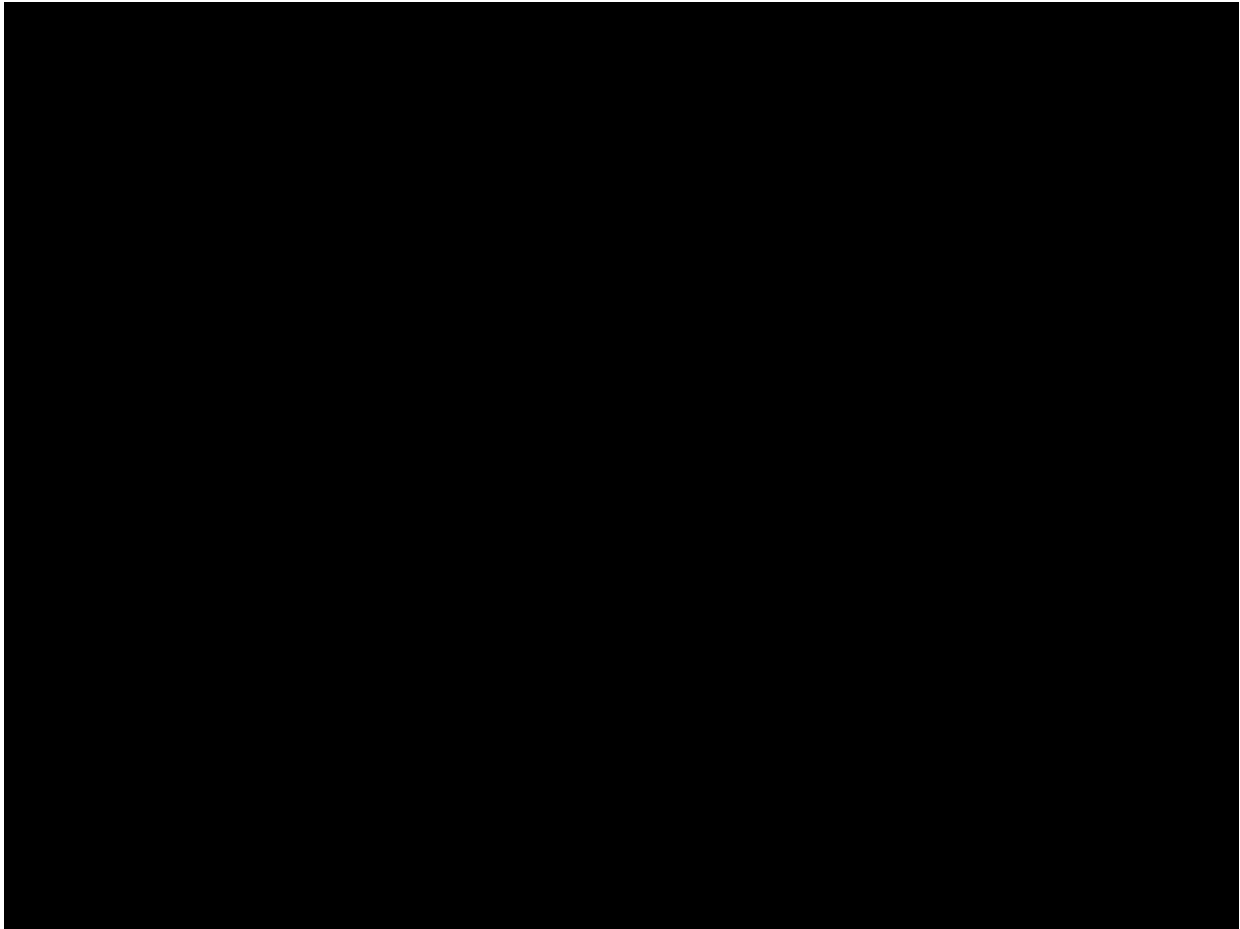
Deepfakes

Facundo Dartayete
Diego Dabezies
Florian Deublein

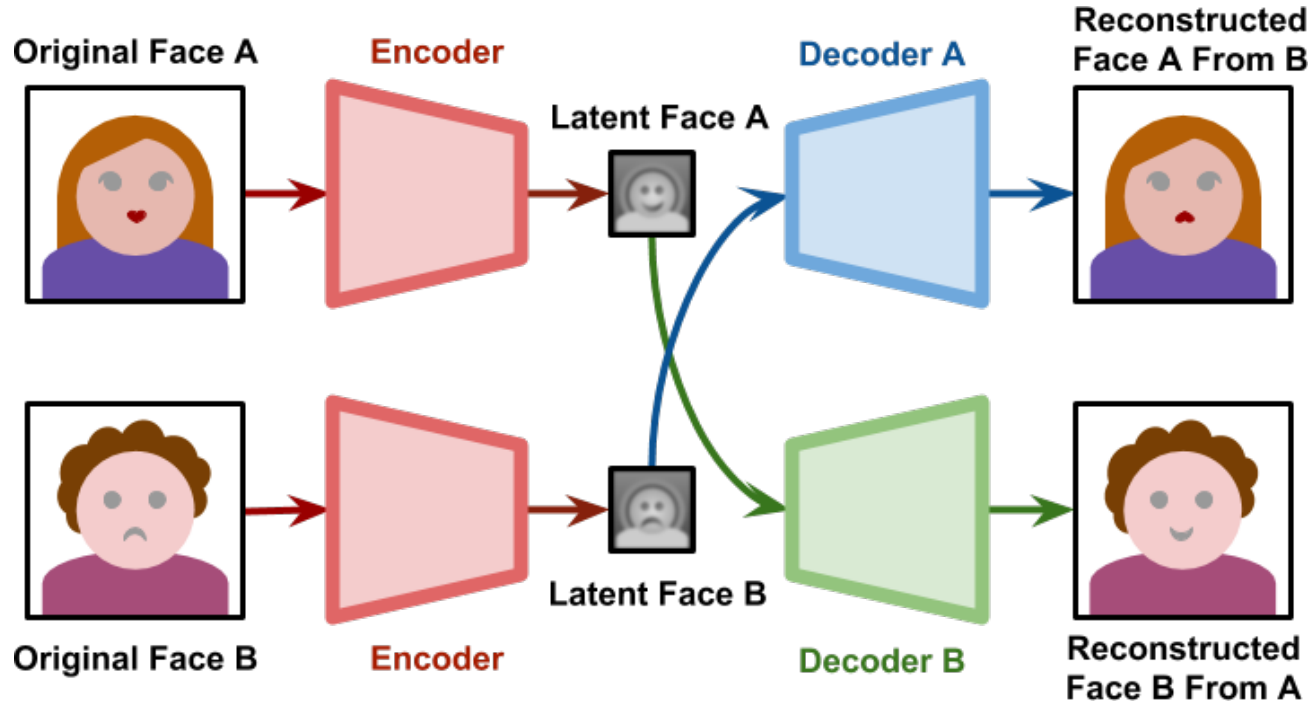
What are deepfakes?

- Deepfake => Deep Learning + fake
- Synthetic media modified to mimic someone's appearance and/or voice
- Powered by Deep Neural Networks, Autoencoders and Generative Adversarial Networks (GANs)



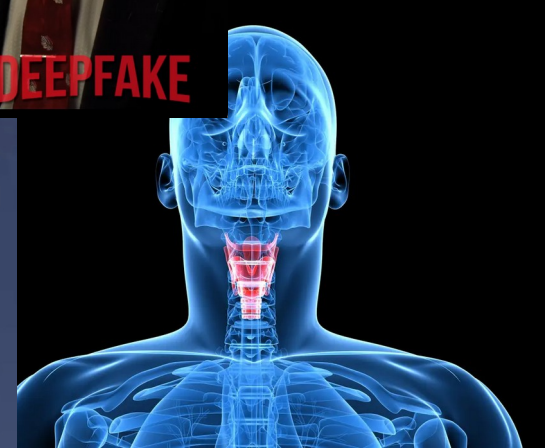


How do they work?



Possibilities

- Education
- Cinema
- Accessibility
- Public safety



Dangers

- Politics
- Society
- Personal harassment



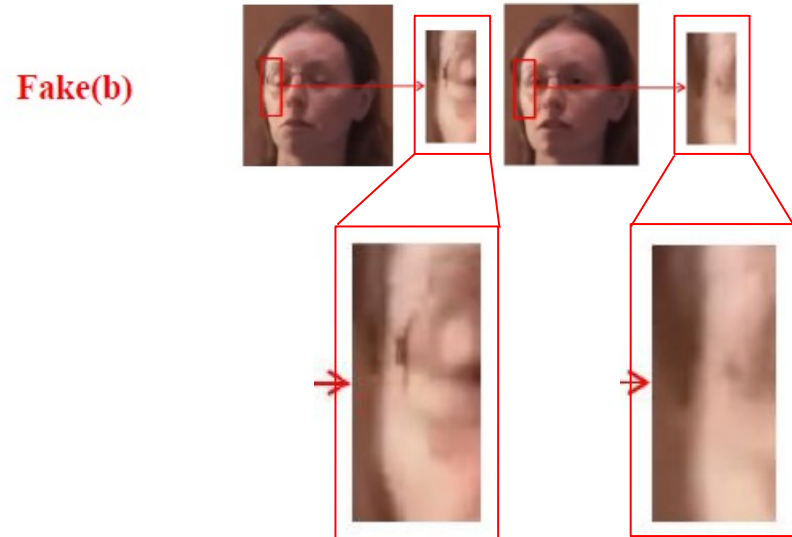
Original showing Alison Brie



Deepfake showing Jim Carrey instead of Brie

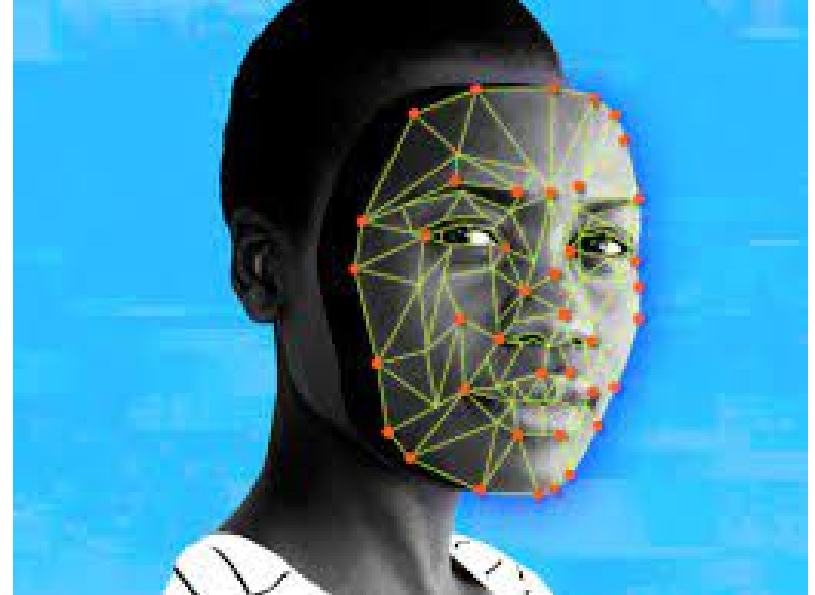
Deepfake detection

- Deepfakes are not perfect:
- Blinking frequency
- Inter-frame inconsistencies



Conclusion

- Extreme dangers to individuals and institutions
- Powerful possibilities for society
- => Regulation of deepfakes by law
- => Further research obligatory



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