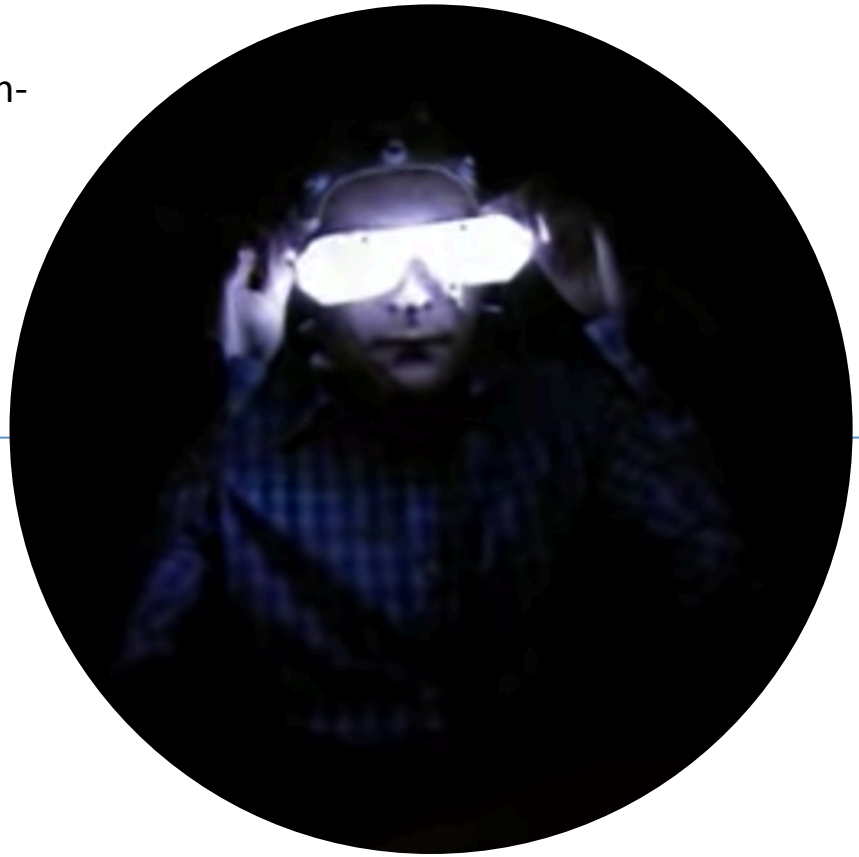
Exploring Vulnerabilities of Brain Biometrics

Challenge:

- How vulnerable are brain-based biometrics to malicious attacks?



Solution:

- Systematic investigation of computational and psychological vulnerabilities.
- New techniques for detecting false brainprints.
- Investigation of brainprint impersonation ("brain hacking").

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Scientific Impacts:

- Brain biometrics are more useful when their vulnerabilities are known.
- This research helps the community understand what is and is not possible to do to attack a brain biometric.

Broader Impacts:

- Substantial popular media attention on this project brings it to a wide audience.
- Makes the public aware of the concept that biometrics aren't foolproof.
- Aids in the design of brain biometrics outside the lab.