

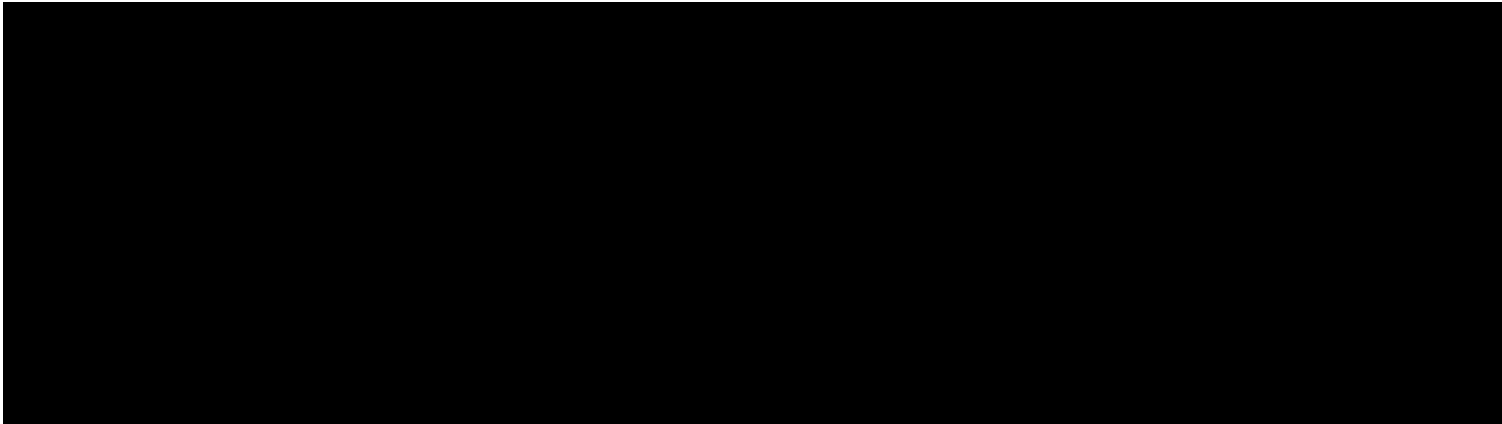
Morph detection activities at the Finnish Police

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Past experiments

- Test data
 - both genuine passport images and separately produced test images
 - home-made, commercial and free morphing algorithms



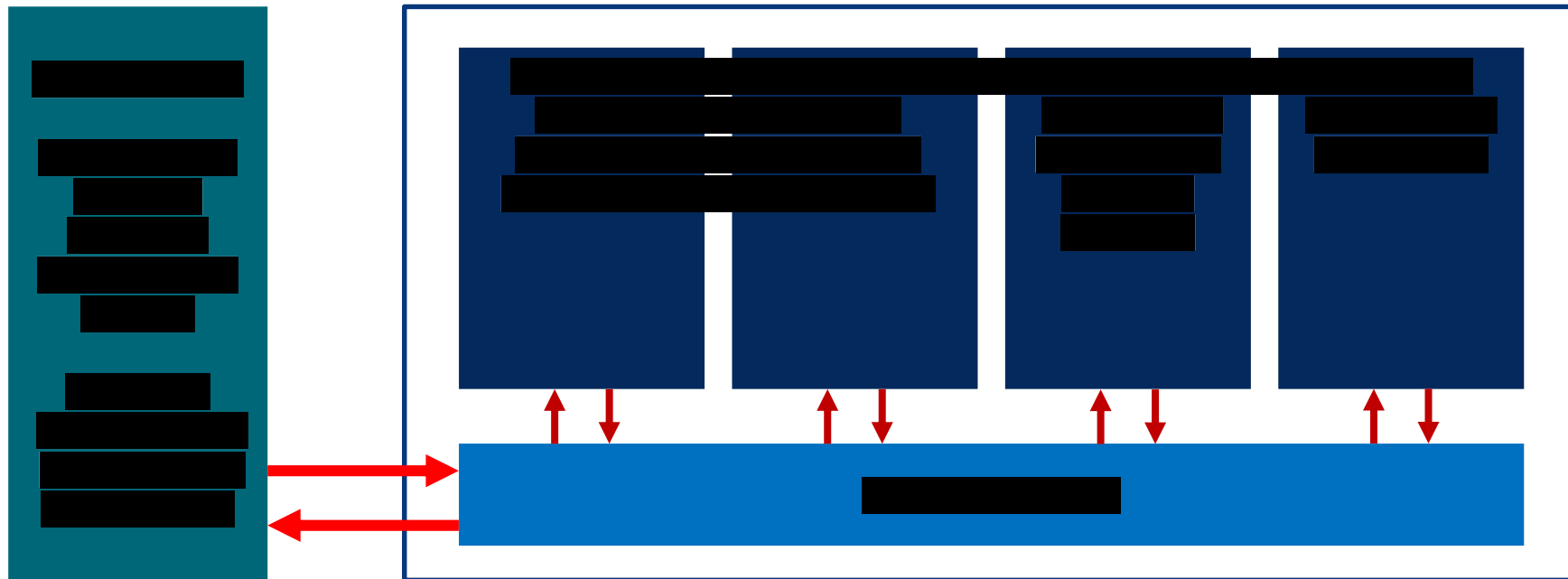
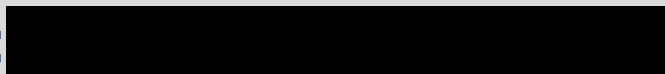
Past experiments, continued...

- Single image: deep convolutional neural networks
 - promising at first, but do not appear to [REDACTED], [REDACTED]
 - the [REDACTED] are typically [REDACTED]
- Image pair: de-morphing
 - [REDACTED] between the images
 - too many [REDACTED] operationally speaking

Current activities

- Recently tested how vulnerable some of the [REDACTED] are to morphing
 - the results seemed a bit better than before
 - perhaps continued [REDACTED] development will shrink the wiggle room that morphing thrives in
- Currently experimenting with Generative Adversarial Networks (GAN)

Under development:



Common interface specification?

- [REDACTED]
- [REDACTED]
scenarios might benefit both users and developers
 - quick, wide testing of new tools
 - quick dissemination and roll-out of good tools
- [REDACTED]
 - trusted hubs that verify and maybe sign modules delivered to them
 - [REDACTED]
[REDACTED]

Thank you

