Playing card prediction using IR

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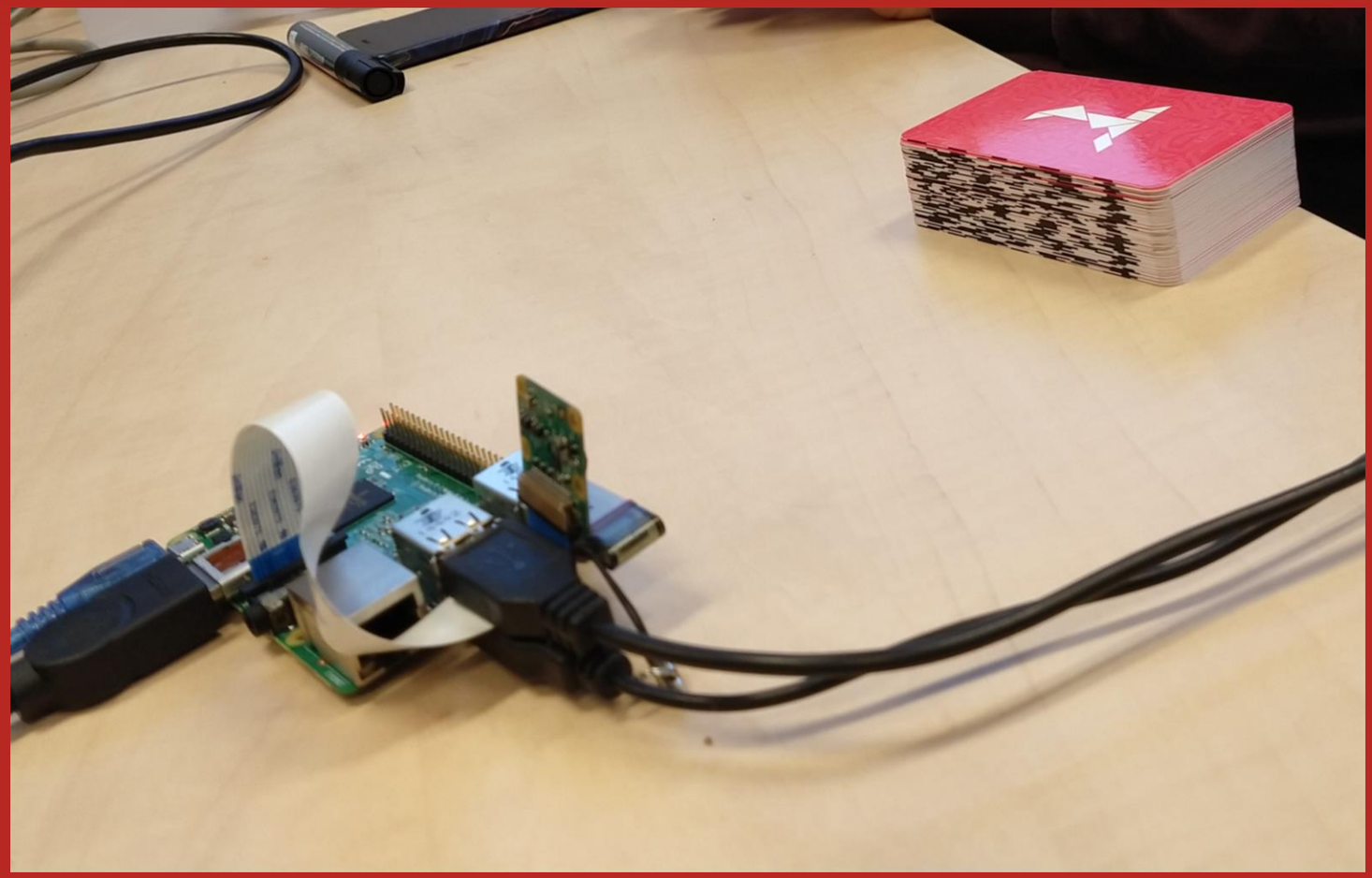
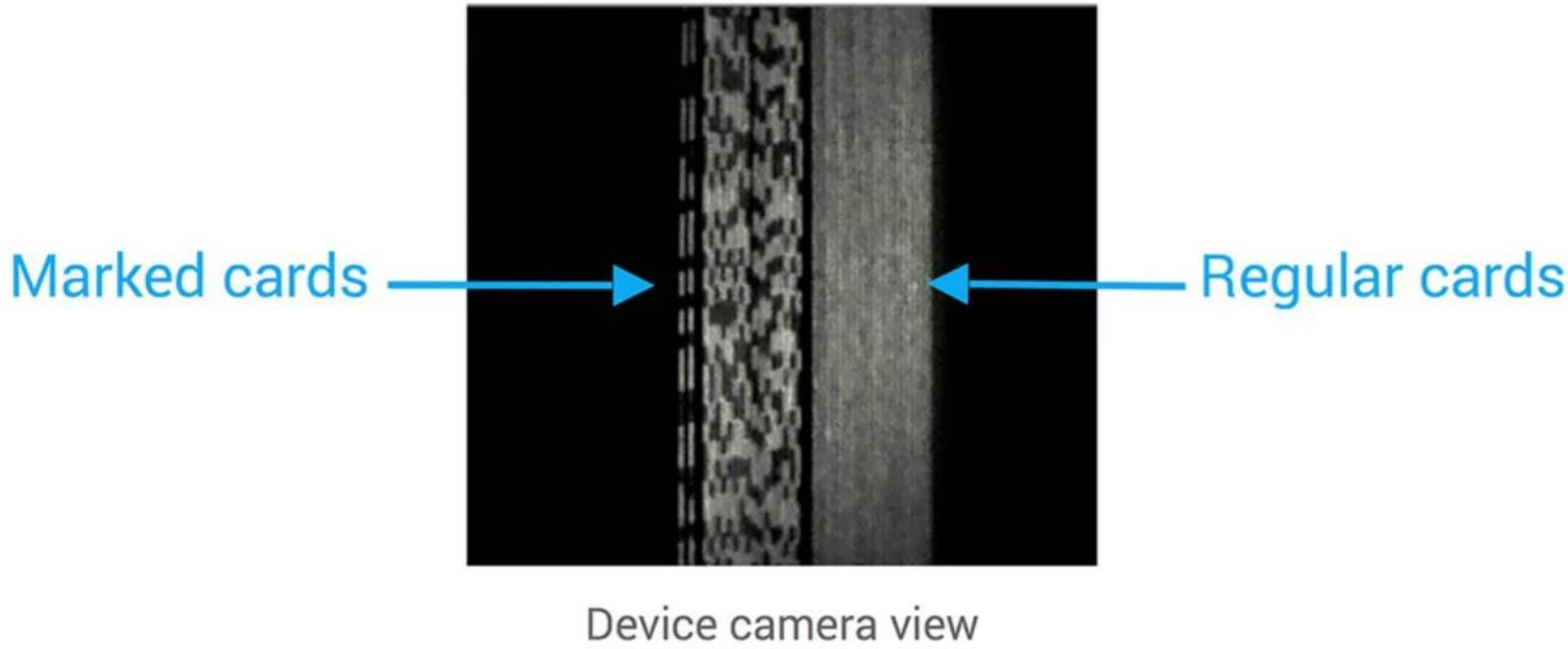


Radboud University

Goal of the project

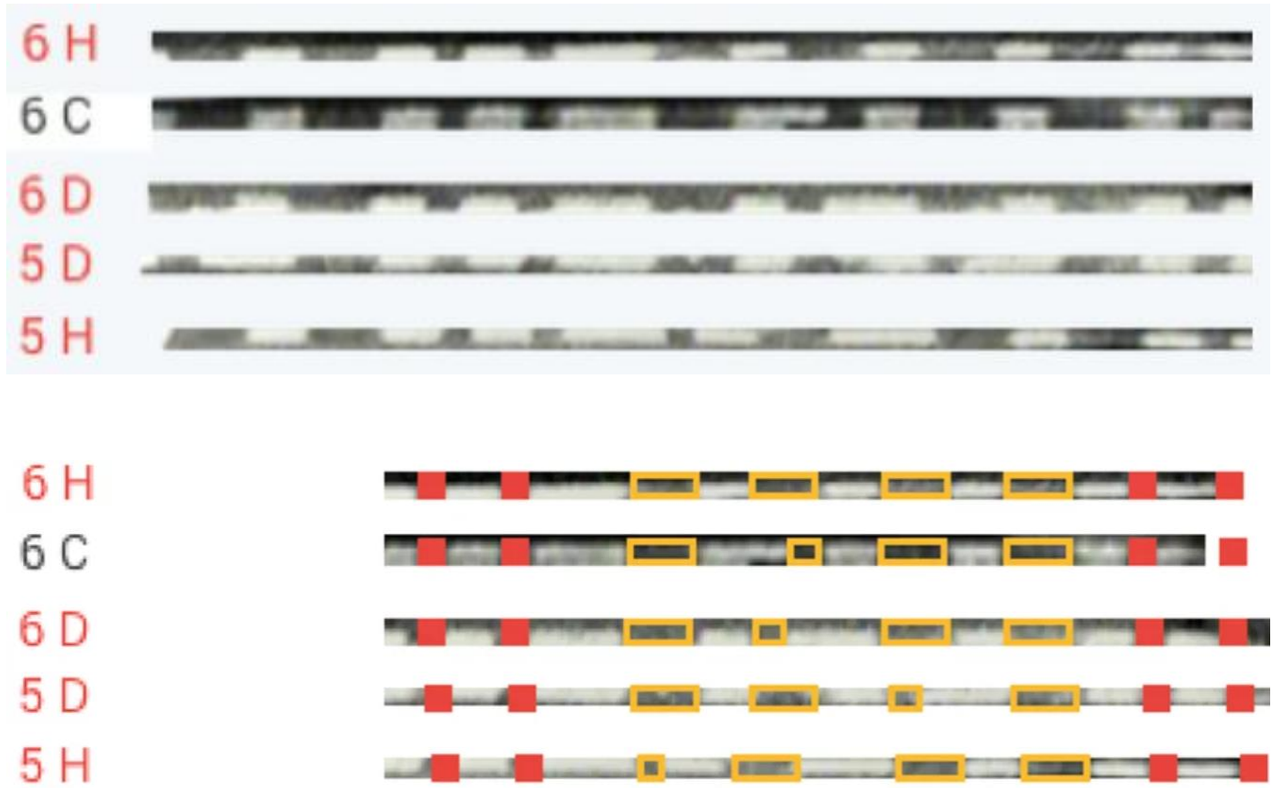
Predicting which cards will be drawn from a stack using IR



Source: **Elie Bursztein**
https://elie.net/blog/security/fuller-house-exposing-high-end-poker-cheating-devices/

Planning

1. Select a system to distinguish 52 cards with markings on the sides
2. Create an efficient way to mark the cards correctly
3. Create a steadying prop for the camera
4. Use machine learning to recognise these markings
5. Translate the software for IR camera
6. Output the predictions in a cool way



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Required equipment and problems

IR ink

- Expires after 1 month
- At least €30

IR camera of sufficient quality

- Hard to find exclusive IR camera instead of NoIR
- At least €49
- Possibly too low quality to notice the markings on the cards

Normal camera of sufficient quality with IR filter

- At least €8
  (camera already in NDS inventory)
- Specific IR frequency