## Playing Card Detection and Identification

## **Group Members:**

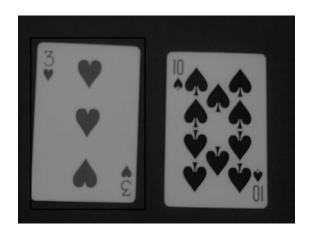
Oğuzhan BAŞKAYA 151220174040

Hüseyin Oğuz ÖZYURT 151220164113

Başar Eğin 151220174011

## **Objective**

A program which detects standard 52-card deck and prints their ranks and suits. We will use MATLAB for this project. We will take pictures of each card's suit and rank. We will use these template photos in the code to detect of any 52 cards. This program detects numbers and shapes in card photos. After detection process, program prints ranks and suits of showed picture. We will take the pictures a plain background that will not interfere with the cards.



## References

- Z. Zou, Z. Shi, Y. Guo and J. Ye, "Object detection in 20 years: A survey", 2019.
- R. Girshick, J. Donahue, T. Darrell and J. Malik, "Rich feature hierarchies for accurate object detection and semantic segmentation", CVPR 2014.
  - J. P. M. Pimentel, Machine vision in casino game monitoring, 2011.
- Z. Guo, X. Zhang, H. Mu, W. Heng, Z. Liu, Y. Wei, et al., Single path one-shot neural architecture search with uniform sampling, 2019.
- M. Tan and Q. V. Le, "Efficientnet: Rethinking model scaling for convolutional neural networks", ICML, pp. 6105-6114, 2019.