

# Using Service Oriented Architecture for Plate Recognition by Mobile Devices

M Karakaya<sup>1</sup>, G Şengül<sup>2</sup>

<sup>1,2</sup>Department of Computer Engineering, Atılım University,  
İncek, Ankara, TURKEY

<sup>1</sup>*murat.karakaya@atilim.edu.tr*, <sup>2</sup>*gokhan.sengul@atilim.edu.tr*

## ABSTRACT

Automatic license plate recognition is the process of determining vehicle number plates from images. The process is essentially based on the image processing techniques. In this study we propose a Service Oriented solution for automatic license plate recognition on mobile devices. The main aim of the proposed system is to be used to detect incorrectly parked cars and their owners in special areas such as university campuses. In the proposed system the images are captured by the mobile devices, and those images are transferred to a server by internet or intranet environments. All the image processing applications are done on the server site and finally the server returns the owner's name and his information about the cars to the mobile device. For the plate recognition we used the Speeded Up Robust Features (SURF) approach. The proposed system gives promising results.

**Keywords** image processing, plate recognition, SURF, SIFT