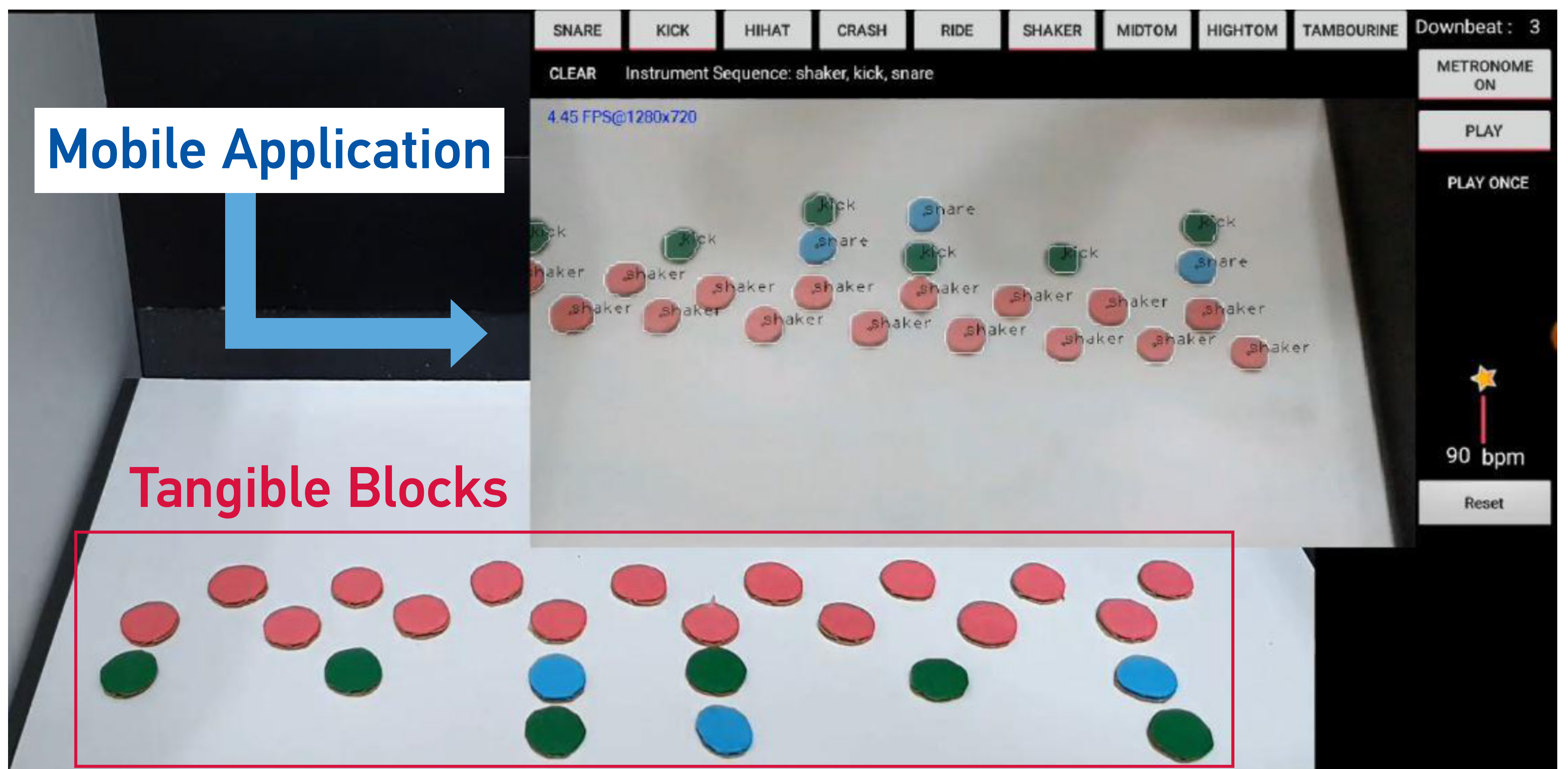


# Mobile Application for Music Synthesis Using Tangible Blocks

Student: Ong You Ping

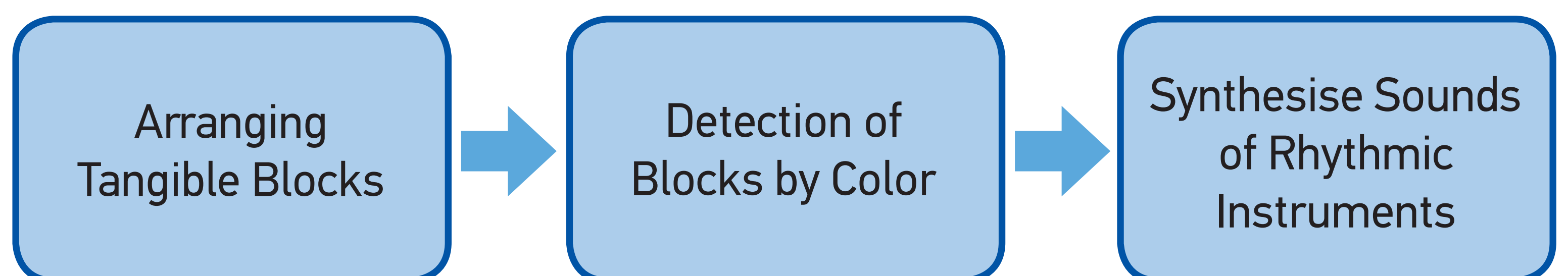
Supervisor: Assoc Professor Goh Wooi Boon

Exploring the possibility of creating or recreating musical rhythms in real-time using tangible objects, which would be detected via the rear camera of a mobile device.



## Technologies Used:

- Android
- OpenCV



Detection of tangible blocks via color blob detection algorithm.

The application synthesises sounds of rhythmic instruments based on the relative positions of the detected blocks.

The horizontal position of detected blocks defines the rhythmic pattern.

The layering of instrument sounds can be done by placing the tangible blocks with a similar vertical position.