An Android app that enables the user to put the event information (time and location) into calendar by snapping a picture on the poster.

**Introduction**

**System Pipeline**

Capture Image → Downsize Image → Preprocess Image (Rectify, Sampling, Histogram Equalization) → Text Detection (Variance, Edge Density, Region Filtering) → Send String to Device

**Poster Processing Steps**

Input Image SubSample → Edge Detection (Hough Transform) → Find bounding quadrilateral to rectify → Homography Transform

Preprocess Image → Text Variance & Edge Density → Filter Region (Area, Height, Orientation, Solidity) → Bounding Box for text

**Extraction Results**

Input Image → Rectified Image → Text Crop → OCR Result → App Screenshot

**Future Work**

1. Add another function of detecting topic by estimating font of the text in the image
2. Use Stroke Width Transform to improve text detection
3. Perform better text segmentation from cluttered background rather than simply Otsu's Method

**References**