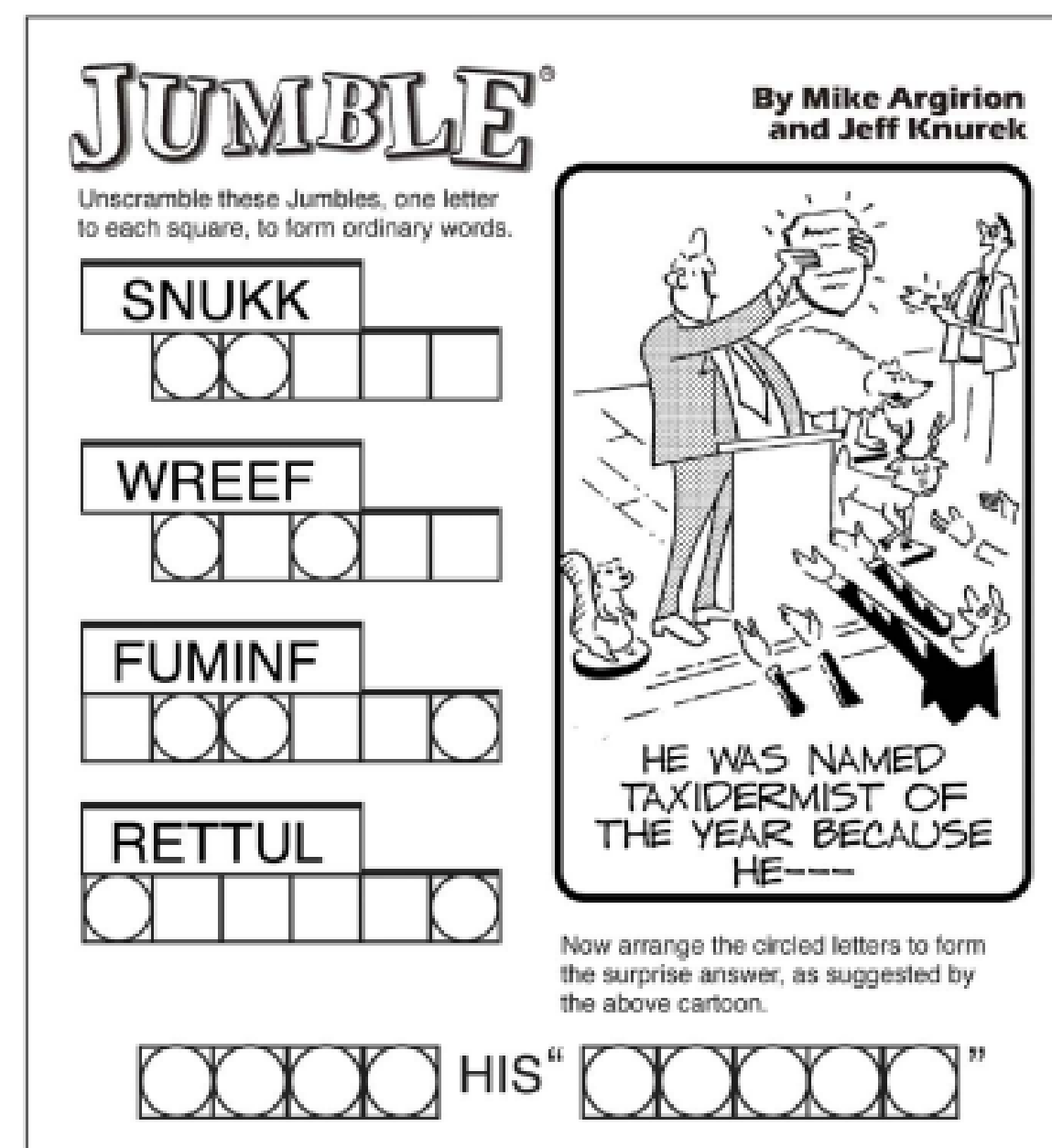


Magic unJumble : Solving Word Jumbles on an Android Phone

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Motivation

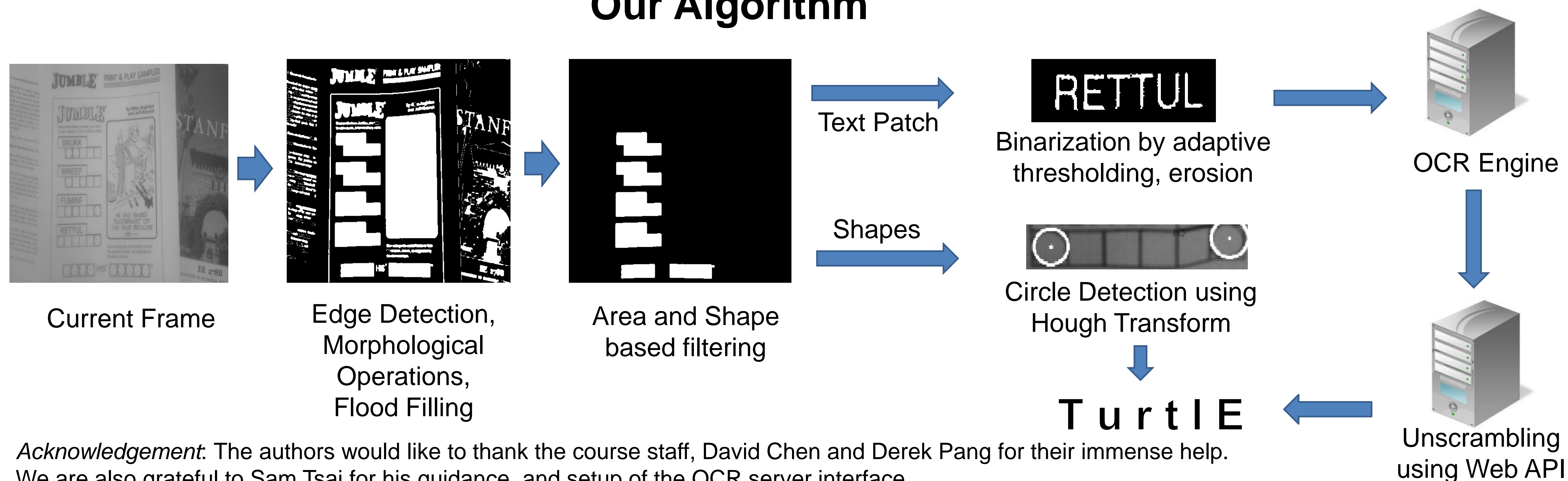
- Create an Android app to assist the user in solving the popular daily word 'JUMBLE'.
- The app should automatically detect the letters and unscramble them, while also highlighting the circled letters.



Android Implementation

- Each camera preview frame processed by our algorithm, implemented using an OpenCV JNI Wrapper for Android (algorithm runs on the phone).
- Algorithm selects a 'best frame' based on number of word patches and number of circles detected.
- Letter patches of the 'best frame' are sent to Tesseract OCR engine running on a server for recognition.
- Output of the OCR engine is sent to a Web API for unscrambling.

Our Algorithm



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Android UI

