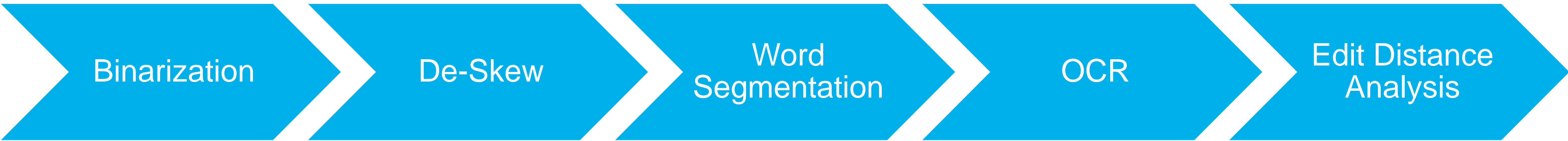


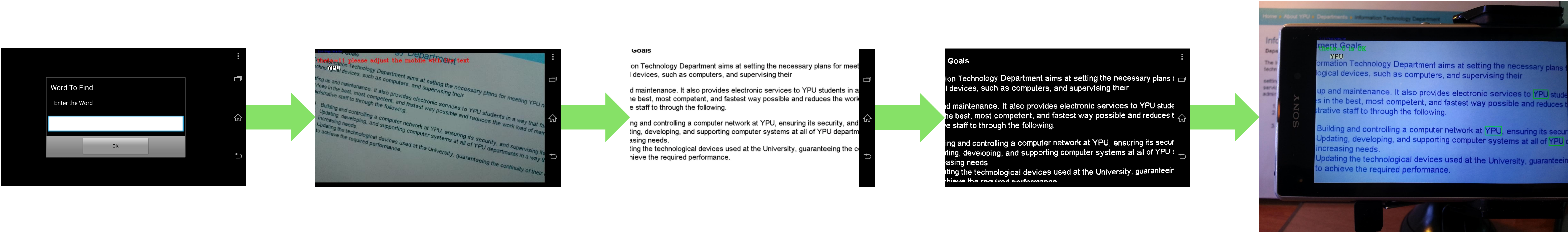
## Motivation:

Have you ever needed to search for a keyword on a textbook when cramming for an exam? If so, this app is here to help! All you need to do is to type the keyword, point and shoot. The app finds any keyword matches in your view frame.

## Image processing flowchart:



## The Algorithm in Brief:



## Technical Highlight:

- Locally Thresholding
- Smart Segmentation
- Hough Transform
- Tesseract-tailored Preprocessing
- Levenshtein Distance

## Feature and challenges:

- Automation and Robustness: Automatic word segmentation, de-skew, de-noise, and word recognition.
- Fuzzy recognition: Highlights both exact matches and close matches, in case image quality is low.
- Efficiency: Highlight matched words efficiently.

## Future Work:

- Integrated voice search
- Use cloud computing (Client-Server).

