**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.

**Features 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 (Support both snapshot and scan mode).

**Image Processing Flowchart**

- Binarization
- De-skew
- Word-Segmentation
- OCR
- Edit Distance Analysis

**Technical Highlight**

- Locally Thresholding
- Smart Segmentation
- Hough Transform
- Occurrence-based Size Estimation
- Tesseract-tailed Preprocessing
- Dynamical Programming

**Cloud Computing Flowchart**

**Experimental Results**

- Accuracy by Keyword Length
- Accuracy by Tilt Angle

**Future Work**

- Use SURF to enable fast recognition in Scan Mode
- Integrated voice search

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