# Return just your search: privacy-preserving homoglyph search for arbitrary languages

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# Problems & Ideas

- Problems of efficient privacy-preserving homoglyph search for arbitrary languages
  - Homoglyph search on encrypted data for arbitrary languages
  - Low index overhead and no the false-positive
- Ideas: Searchable encryption adopting novel fuzzy keyword set
  - Formulate the common homoglyph character set and their similarity
  - Build secure index based on the common homoglyph character set

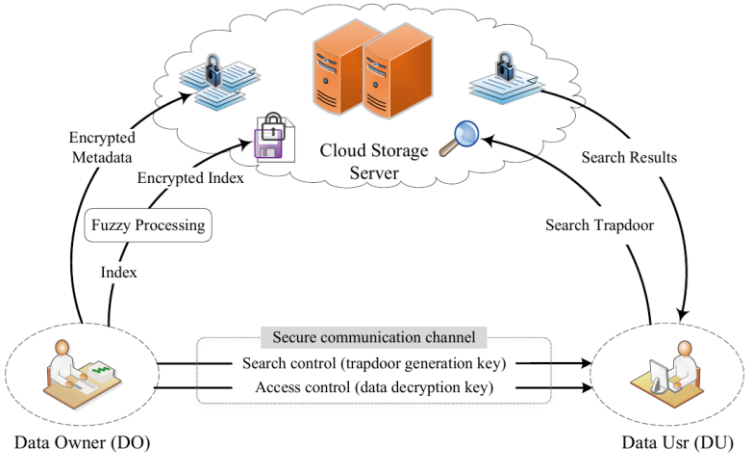



**Fig. 1** System model of POSA.

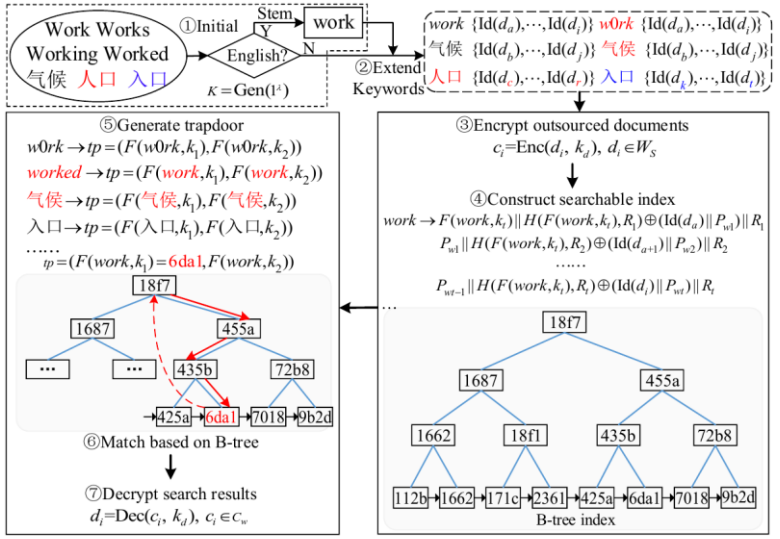
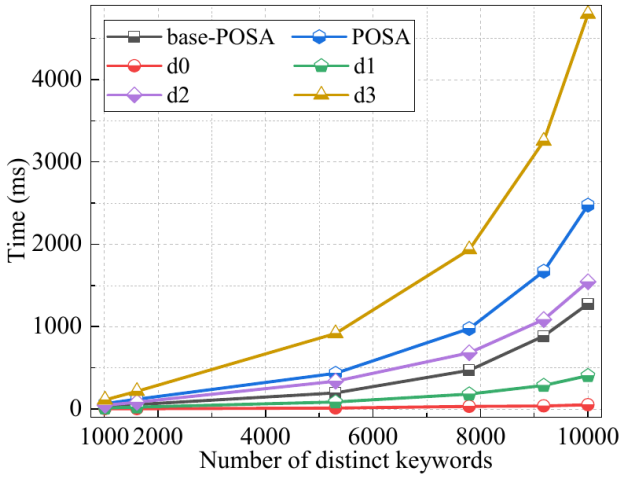


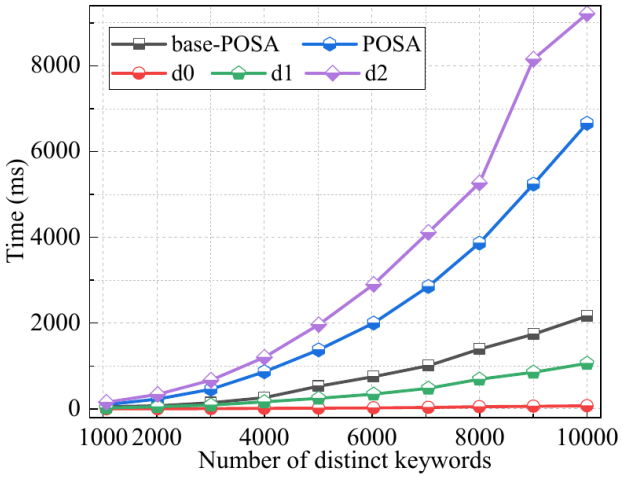

**Fig. 3** The main steps of POSA.

# Experimental Results

- **The building time of searchable index for different languages**

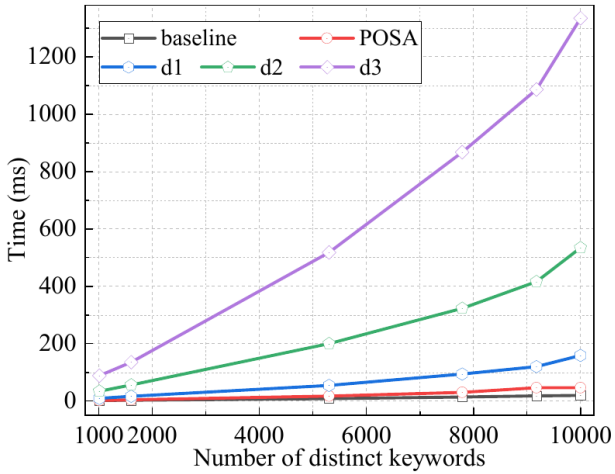



(a) Chinese

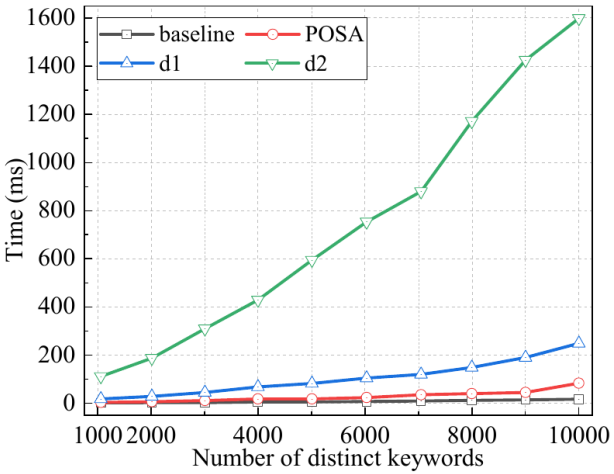



(b) English

- **The searching time of different languages**




(a) Chinese




(b) English