

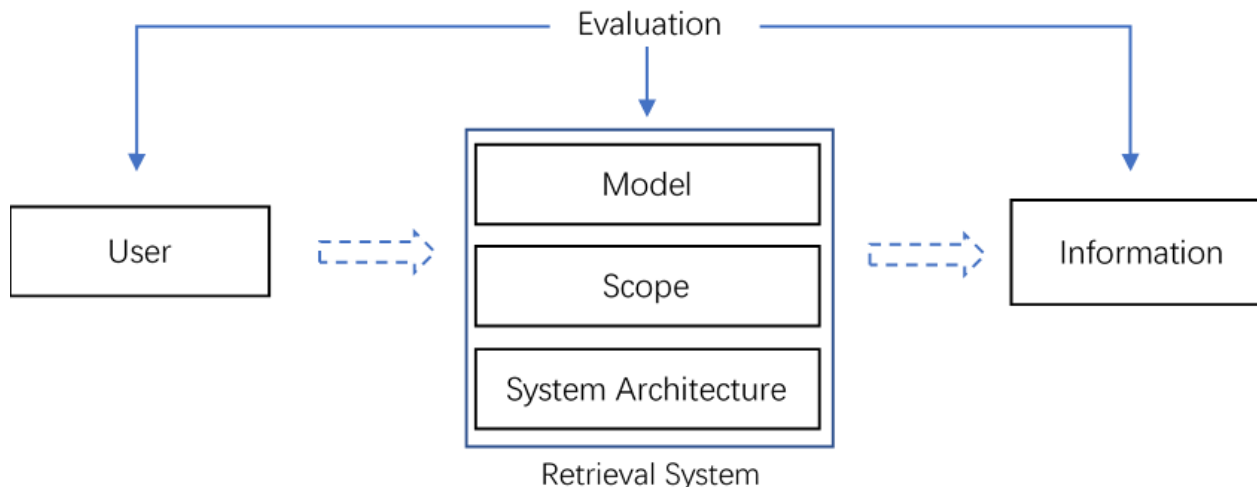
# Information retrieval: a view from the Chinese IR community

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Frontiers of Computer Science, DOI: [10.1007/s11704-020-9159-0](https://doi.org/10.1007/s11704-020-9159-0)

# Problems & Ideas

- Problems: IR researches seem to be shrinking
  - SIGIR are keeping stable if not declining, while those to the sibling conferences KDD and ACL have significantly increased
  - IR related research topics found their new home
  - IR community remains in its traditional pace
- Ideas: rethinking the definition of information, retrieval, user, system, and evaluation
  - A strategy workshop
  - A list of exciting and challenging future research directions



# Main Contributions

- **New Definition and Representation of Information**
  - Fusion of big data from heterogeneous sources, representation of indexed data, representation of extracted knowledge
- **Enlarged Scope of Retrieval**
  - From active to passive information retrieval, going beyond retrieving a closed set of documents, going from search engines to analytic engines, new functions for IR
- **AI-Enhanced Retrieval Models**
  - IR models with neural representations, using deep neural networks, using reinforcement learning, using adversarial methods
- **Expanded Role of Users**
  - Including Users in the IR Circle, User Profiling and Personalization, Personalization and Diversification, User-centric Evaluation for IR systems
- **New System Architecture**
  - IR framework for fully decentralized network, information collection on complex network structure, distributed indexing and exchanging mechanism, search results fusion in distributed heterogeneous environment
- **New Evaluation Methodology**
  - Evaluation of spatial and temporal aware retrieval systems, understand the general Web search users, crowdsourcing based evaluation, evaluation dataset construction