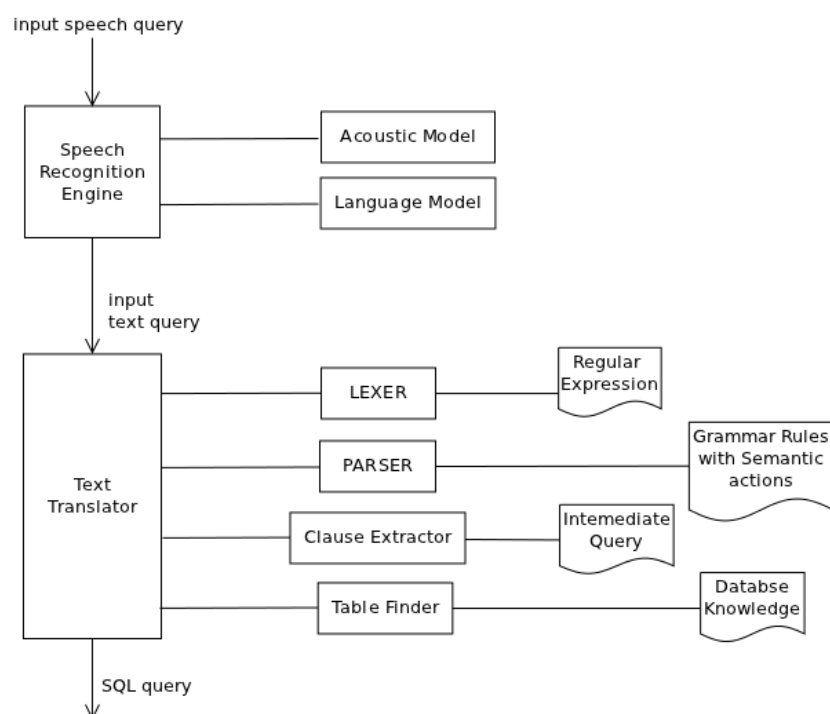


Introduction	Methodology	Results & Conclusions	Advantages & Disadvantages
System uses the knowledge of underlying database and generate lex file automatically which will be used while tokenizing the words involved in English text query and since lex file contains underlying database information like column and table names so automatic generation of lex file helps in making the System database independent	<p>In first phase speech is converted into text,</p> <p>In second phase we analyse the text whether it is syntactically correct or not based on grammar rules for valid queries,</p> <p>In third phase text is mapped into an intermediate query using lexer, parser and syntax directed translation,</p> <p>In fourth phase we extract the SELECT clause and WHERE clause from the intermediate query,</p> <p>In fifth phase we find all the required tables to form the FROM clause and thus SQL query is formed,</p> <p>In sixth phase formulated SQL query is fired to database and result is obtained.</p>	System has been checked for single tables and multiple tables and it gives correct result if the input query is syntactically consistent with the Syntactic Rules.	<p>System is database independent i.e. it can be configured automatically for different databases.</p> <p>Area in which system can be improved is the grammar.</p>



Salma Jamoussi, Kamel Smali, Jean-Paul Haton. From speech to SQL queries : a speech understanding system. *The twentieth national Conference on Artificial Intelligence workshop on spoken language understanding*, 2005, Pittsburg, United States.

Introduction	Methodology	Results & Conclusions	Advantages & Disadvantages
<p>The statistical approach which constitutes the most used method for resolving the speech understanding problem.</p>	<p>For this, we use a Bayesian network for unsupervised classification, called Auto Class and</p> <p>we expose three methods for the vector representation of words, these representations aim to help the Bayesian network to build up efficient concepts</p> <p>We test this method on two applications data and we compare the Bayesian network performances with those obtained by the Kohonen maps and the K-means algorithm.</p> <p>Then, we will describe the last stage of our understanding process, in which we label the user requests and we generate the associated SQL queries.</p>	<p>We use a speech recognition system to be able to treat sentences given in their signal forms. Two kinds of results are given in this paper.</p> <p>The first results are obtained when the system input is speech and</p> <p>The second ones concern the textual entry form.</p>	<p>The speech recognition system gives only a performance of 62%. When entry is text, the understanding performance reaches 92%. The understanding rate is 78-82%</p> <p>In future this model be able to add new words to the appropriate concepts within the exploitation step.</p>

Blunschi, Lukas, Claudio Jossen, Donald Kossmann, Magdalini Mori, and Kurt Stockinger. "Soda: Generating sql for business users." *Proceedings of the VLDB Endowment* 5, no. 10 (2012): 932-943.

Introduction	Methodology	Results & Conclusions	Advantages & Disadvantages
Search over Data Warehouse enables a Google-like search experience for data warehouses by taking keyword queries of business users and automatically generating executable SQL. The key idea is to use a graph pattern matching algorithm that uses the metadata model of the data warehouse.	<p>SODA addresses this need of business users by allowing them to pose queries in an intuitive, high-level language based on keywords, operators and values.</p> <p>Then SODA translates these queries into a set of alternative SQL queries, ranks those queries, and (partially) executes the Top 10 in order to generate result snippets (up to twenty tuples) for each of these queries. Just as in a Web search with Google or Bing, the user has now the choice to select one of those queries of the first result page, ask for the next set of candidate queries (i.e., the next result page), or refine the original query.</p>	The key idea of SODA is to use a graph pattern matching algorithm to generate SQL based on simple key words. Our experiments—with both synthetic data as well as with a large data warehouse of a global player in the financial services industry—show that the generated queries have high precision and recall compared to the manually written gold standard queries	As part of our future work we will evaluate the impacts of using DBpedia for matching keyword queries against various synonyms found in our classification . Since the use of DBpedia will naturally increase the number of possible query results—the query complexity. Furthermore, the current GUI of SODA could be extended in several ways to engage the user in selecting and ranking the different results