Project Induction
Information retrieval with Citation Indexes

Coverage
Science Citation indexes (and its sibling citation indexes) is a large, multidisciplinary bibliographic reference database. (A bibliographic reference database gives you references and usually abstracts (a short summary of the paper).)

You can read the full text of the paper by:
- finding it online in the University’s electronic journal collection;
- finding it on paper in the School or University Libraries;
- find it online using Google Scholar;
- requesting the paper through the Inter-Library Loan service. (Consult your supervisor first as this is an expensive service.)

Sometimes there is a direct link from a service such as Science Citation Index to the University’s electronic journal collection (as is shown in the search performed here).

Compared to other services (e.g. Inspec and ACM Guide to Computing Literature) Science Citation Index’s coverage of Computer Science is relatively limited. However, it takes its inspiration from Bradford’s law of scattering which states (informally, at least) that about 90% of the literature of a science can be found in 10% of its journals. Science Citation Index’s publishers make regular surveys of the impact of the journals it indexes to ensure that it includes the key journals of the multidisciplinary fields that it indexes.

Science Citation Index can be used as a keyword search tool but its fairly limited range of journals and general lack of conference papers (other than those in Springer’s Lecture Notes in Computer Science series) almost always makes Inspec a preferred choice. Science Citation Index is at its best when you have one good document (journal paper, conference paper, book, technical report, thesis, etc) and you want to find papers that are related to it and that have been published after your document. To do this requires a very different form of search.

Currency
Generally newly published journals and conferences are entered into the citation index databases rapidly.

Formulating a search
The best searches are for papers that are a few years (e.g. 2-3 or more years) old and that have been important in some way. These are papers that are likely to be referenced in more recent papers. Citation indexes search by finding co-citations, assuming that co-citation indicates relevance. In practice, it tends to increase recall.
The seed document

For this search, I will use a paper that is amongst the most important in its field:

Results of the citation search - 1

The first stage is a list of partial references. Note that, because the data is taken directly from the published papers without any editing, there are several forms of the title of the journal:

Select the relevant records

Note the different forms of the journal title.

Few people give page numbers
Results of the citation search - 2

Select the to get the list of papers that cite the seed paper:

Relevant papers selected.

Click on the title to view the full record, including abstract.
Results of title-field search – accessing the abstract

By reading the abstract, we can decide whether the paper is relevant or not.

Accessing the full text.

Follow the link to the University's ejournal collection: (For more information, see the description of the Inspec search.)
Getting an electronic copy of the results of the search

You can select references that seem interesting and have them emailed to you. Having selected one or more references, select the email button and follow the instructions: