

Identifying Patterns and Trends in Campus Placement Data using Machine Learning

Define Problem / Problem Understanding

Literature Survey.

The literature survey is the process of identifying and acquiring the research papers, textbooks, web-sites, theses, etc. That you will require to get a comprehensive overview of the research that has been done in the area that you are investigating.

A focused survey technique is recommended to ensure you hit the ground running and using this technique you are almost immediately in a position to implement experiments.

Recording the papers you have found and read is also of vital importance, and techniques and software available for these tasks are also covered in this section.

If you know the exact domain of your research it makes sense to initially focus your search on papers that relate (almost) exactly to your own research, rather than spending a great deal of time reading every paper under the sun that seems remotely relevant a vital step is to identify e.g. you are doing research on Communities of practice What other keywords do we need to look out for?

Network of practice

Virtual community

Virtual Ethnography

Virtual team

Community-driven knowledge management

Some conferences only get one person to review a paper, others get two, others more the more people that review conference papers, the more prestigious the conference is, since the papers in it are bound to be of very quality.

Journal papers are normally reviewed by several people, and are considered very credible.

Purpose of the Literature Survey

This survey helps our research work in many ways:

Allows us to understand the research journey from the fundamentals till date. Understanding the path the research has taken in the field of our interest, we get higher insight about our field of research.

Can understand the research methodology to take up. While reading the stories associated with earlier research works, we realise the various steps that are involved in the research work.

Each paper we go through, will reinforce the ideas that we intend to continue as our research work. All the unsolved problems, they present as the drawbacks or limitations of their research work, can be a very good sources of goals for our research work.

At the end of the Literature survey phase, we are ready with:

Background: All the information required to begin our journey into research will be very clearly made available.

Research Methodology: Can understand how to proceed with the research

work. The stories of other researchers can be highly inspirational.

Defining Goal : The limitations of the past researchers can be a good source of defining goal for our research.

Main Learning stage: This phase of the research life is the most important one. We cannot proceed even a single step without understanding the background, research methodologies and fixing the field of our research. Hence maximum of our research time must be reserved for this activity. Usually more than 50% of the research time is required to understand the Literature for successful research work.

Literature Review

The purpose of a literature review is to collect relevant, timely research on your chosen topic, and synthesize it into a cohesive summary of existing knowledge in the field. This then prepares you for making your own argument on that topic, or for conducting your own original research.

Depending on your field of study, literature reviews can take different forms. Some disciplines require that you synthesize your sources topically, organizing your paragraphs according to how your different sources discuss similar topics. Other disciplines require that you discuss each source in individual paragraphs, covering various aspects in that single article, chapter, or book.

Within your review of a given source, you can cover many different aspects, including (if a research study) the purpose, scope, methods, results, any discussion points, limitations, and implications for future research. Make sure you know which model your professor expects you to follow when writing your own literature reviews.

Tip: Literature reviews may or may not be a graded component of your

class or major assignment, but even if it is not, it is a good idea to draft one so that you know the current conversations taking place on your chosen topic. It can better prepare you to write your own, unique argument.

Benefits of Literature Reviews

Literature reviews allow you to gain familiarity with the current knowledge in your chosen field, as well as the boundaries and limitations of that field.

Literature reviews also help you to gain an understanding of the theory(ies) driving the field, allowing you to place your research question into context.

Literature reviews provide an opportunity for you to see and even evaluate successful and unsuccessful assessment and research methods in your field.

Literature reviews prevent you from duplicating the same information as others writing in your field, allowing you to find your own, unique approach to your topic.

Literature reviews give you familiarity with the knowledge in your field, giving you the chance to analyze the significance of your additional research.