ABSTRACT

If a country wants to compete in the global world with increasingly fierce competition now, the research and development should be a major concern. The opportunities of research in the future will be an opportunity for the advancement of a nation. Information on the map of cooperation of researchers to be important for researchers to predict the opportunities for cooperation with other researchers.

Sistem Repositori Peneliti Institut Teknologi Sepuluh Nopember (ITS) is an information system that specifically provide information to researchers, students and public society about the research in ITS. This application provide a feature that provides information to users about the map of cooperation of researchers in ITS. Users can see the closeness of cooperation of researchers based on their research topic. Map of this research cooperation is visualized using a graph modeling, so users will be easy to see closeness the researchers. Each researcher is represented by a circle (node) in the graph, while the closeness of the relationship between researchers represented by a line (edge). The larger the node, meaning more and more research has been done by researchers, and vice versa. In addition, the node color indicates of research area. The thicker edge, meaning the closer cooperation between nodes (the researcher).

Map visualization features based on the topic of cooperation of researchers of this study can provide map information of research cooperation at ITS that required by users. The information map of researcher cooperation displayed can help the user to know the progress of research in the ITS.
Keyword: Institut Teknologi Sepuluh Nopember, Graph, Map of Cooperation Researcher, Topic of Research, Visualization