

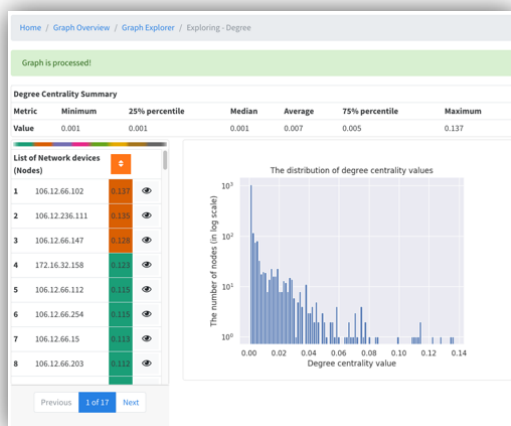
EXPERTS: Explainable Graph Data Analyser

MARKET NEED

- Graph data plays an important role in big data analysis, and there are an increasing number of companies interested in being able to derive insights from this type of data.
- Graph data contains information about relationships among data points. Thus, useful insights can be mined where these connections matter. One major limitation of existing graph data analysis tools is that they require an understanding of many complex concepts and terms such as centrality, modularity, motif finding etc. which are not readily familiar even for data analysts.
- The EXPERTS project provides a use-case based graph data analysis tool that allows practitioners to quickly and easily understand useful insights derived from their data.

TECHNOLOGY SOLUTION

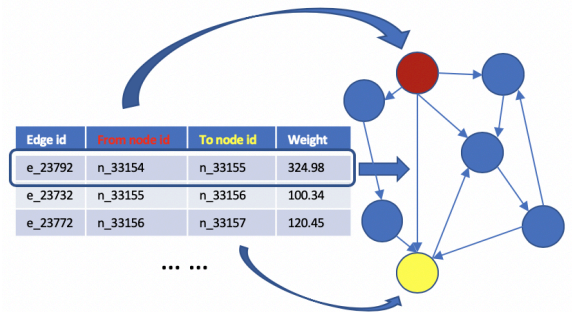
- We have developed a web based analysis tool that allows users to explore their graph data using common graph analysis metrics which are presented in an easy to interpret way. We focus on explainability.



KEY FEATURES

The key features of EXPERTS are:

- **Highly-interactive.** Instead of exposing a selection of data structures, algorithms, and measures directly to users, our tool guides the user in exploring their dataset using common graph analysis metrics that are clearly explained.
- **Scenario-specific.** Graph data analysis makes sense particularly when connections among data points matter. The tool enables the user to analyse their data from the perspective of what the nodes and connections in their data means.



CONCLUSION

- Current graph data analysis tools are generally aimed at expert users – data analysts with deep knowledge of graph analysis metrics and techniques. Thus they are difficult to use and to interpret by non-expert users.
- We developed our demonstrator to show how graph analysis can be performed by non-expert users in an intuitive and interpretable way through an interactive and scenario specific interface.

RESEARCH TEAM

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