

2020

## Towards a General Solution for Layout of Visual Goal Models with Actors: Supplemental Material

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### Recommended Citation

Wang, Yilin Lucy and Grubb, Alicia M., "Towards a General Solution for Layout of Visual Goal Models with Actors: Supplemental Material" (2020). Computer Science: Faculty Publications, Smith College, Northampton, MA.  
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# Towards a General Solution for Layout of Visual Goal Models with Actors

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**Abstract**—Goal models help stakeholders make trade-off decisions in the early stages of project development. While these approaches have significant analysis capabilities, they have yet to see broad industrial adoption, with the construction of scalable large realistic goal models acting as a significant barrier. Over the last decade, researchers have used *force-directed algorithms*, specifically GraphViz, to layout goal models and have called for improved layout algorithms to better accommodate the unique challenges presented by actor-based models. We extend a force-directed algorithm to include goal model heuristics, and independently arrived at a domain specific version of a generic layout algorithm for *undirected compound graphs*. As initial validation of the effectiveness and scalability of our algorithm, we implement our approach in AnonymousTool, a goal model analysis tool. Initial results are promising; yet, further collaboration and validation across the various goal modeling approaches (e.g., GRL, iStar, Tropos) is required before we can recommend our approach to be adopted in tooling. This paper presents early results and lays a foundation for discussion within our GORE community.

This is a place holder document for the supplemental information for this paper.