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

Yilin Lucy Wang  
*Smith College*

Alicia M. Grubb  
*Smith College, amgrubb@smith.edu*

Follow this and additional works at: [https://scholarworks.smith.edu/csc_facpubs](https://scholarworks.smith.edu/csc_facpubs)

Part of the Computer Sciences Commons

**Recommended Citation**

[https://scholarworks.smith.edu/csc_facpubs/152](https://scholarworks.smith.edu/csc_facpubs/152)

This Conference Proceeding has been accepted for inclusion in Computer Science: Faculty Publications by an authorized administrator of Smith ScholarWorks. For more information, please contact scholarworks@smith.edu
Towards a General Solution for Layout of Visual Goal Models with Actors

Yilin Lucy Wang, Alicia M. Grubb
Department of Computer Science
Smith College, Northampton, MA, USA
{lwang, amgrubb}@smith.edu

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.