# OAK RIDGE NATIONAL LABORATORY

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# Cyber Security Econometrics System (CSES) for Assessing/Ranking Threats

## **Disclosure Number**

201002514

# **Technology Summary**

Here, we discuss how CSES is used to rank candidate threats (i.e., semantically enhanced structural anomalies) for the benefit of a human operator assessment: (a) regarding their potential as a significant emergent threat and its consequent impacts, (b) semantics will be used in the threat ranking process, (c) rankings will include justifications based on semantics and (d) supporting drill-down transparency for building confidence. The model values missions and assets of the cyber environment under study for all stakeholders as well as the likelihood of threats materializing. Moreover, by assessing the set of candidate threats and their associated relationships to missions and assets, the extended CSES can determine the impact of a malicious mission against its target (e.g. asset and/or mission disruption).

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