Comprehensive Exam - Questions and Answers

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Question 1

Select one of these 2 papers (*Anomaly detection in cyber physical systems using recurrent neural networks*[1] or *Checking is believing: Event-aware program anomaly detection in cyber-physical systems*[2]), and critique it and the work described in it. Then describe how the potential methods and measurements you want to investigate would aide in evaluating the sceptibility of their proposed approach. Then, in one of the real-world domains you want to explore, discuss how the author's proposed approach compares and contrasts to what you are proposing to do.

Question 2

Question 3

Question 4

References

[1] J. Goh, S. Adepu, M. Tan, and Z. S. Lee, "Anomaly detection in cyber physical systems using recurrent neural networks," in *2017 ieee 18th international symposium on high assurance systems engineering (hase)*, 2017, pp. 140–145.

[2] L. Cheng, K. Tian, D. Yao, L. Sha, and R. A. Beyah, "Checking is believing: Event-aware program anomaly detection in cyber-physical systems," *CoRR*, vol. abs/1805.00074, 2018.