

Apr 1st, 1:20 PM - 1:40 PM

Interactive Visualizations for Explanation in AI

Ashley Ramsey
waramsey@unomaha.edu

Follow this and additional works at: <https://digitalcommons.unomaha.edu/csworkshop>

 Part of the [Computer Sciences Commons](#)

Please take our feedback survey at: https://unomaha.az1.qualtrics.com/jfe/form/SV_8cchtFmpDyGfBLE

Ramsey, Ashley, "Interactive Visualizations for Explanation in AI" (2022). *Computer Science Graduate Research Workshop*. 12.

<https://digitalcommons.unomaha.edu/csworkshop/2022/schedule/12>

This Event is brought to you for free and open access by the Conferences and Events at DigitalCommons@UNO. It has been accepted for inclusion in Computer Science Graduate Research Workshop by an authorized administrator of DigitalCommons@UNO. For more information, please contact unodigitalcommons@unomaha.edu.

Interactive Visualizations for Explanation in AI

Ashley Ramsey, Graduate Student, Computer Science

Faculty Mentor: Brian Ricks

Machine learning models commonly suffer from a lack of trust and understanding that comes from their complexity. The field of explainable artificial intelligence (XAI) seeks to rectify this problem by developing methods of explaining machine learning models and their outputs to relevant parties. In the area of bridge engineering, machine learning can offer insight into the relation between a bridge's conditions and its environment. In this project, I am creating two visualizations to explain a machine learning model that identifies which features of a bridge make it more likely to receive repairs. The first visualization is a post-hoc explanation that takes the output of the machine learning model and organizes it and presents it in such a way that it is interactive and easy to understand. The second visualization clarifies the inner workings of the model so a user can see how the output data came to be. Together these visualizations will work to make the bridge repair model clearer and more comprehensible.