



INSPECTOR CAT

Recently, artificial intelligence (AI) tools have been developed to produce digital images from text-based descriptions. These tools use generative AI models that learn to represent complex objects and scenes by training on a large dataset of image-text pairs, and leverage diffusion-based models to merge the components. For this technical focus issue on AI/machine learning, Microsoft Bing Image Creator (powered by DALL-E) was used to explore the potential of generating images related to nondestructive testing. The cover art of this issue was generated using the prompt: "ultrasonic inspection of automotive welds, high resolution with dramatic backlighting." By just adding "cat" in front of "inspector performing phased array inspection of an aircraft structure, in high resolution," a seemingly realistic image of a cat inspecting an aircraft was created. While detailed (and humorous) images such as these can be generated in seconds, users should be aware of potential quality issues (like handling text in images) and inherent biases (from the large datasets used for training) when using these tools.

SUBMITTED BY JOHN ALDRIN, COMPUTATIONAL TOOLS, GURNEE, IL

We want to see how you are creating a safer world! To submit a photo for consideration, please email a high-resolution photo (min. 300 dpi) along with a 100 to 150 word description to MEeditor@asnt.org.

RESEARCH IN NONDESTRUCTIVE EVALUATION

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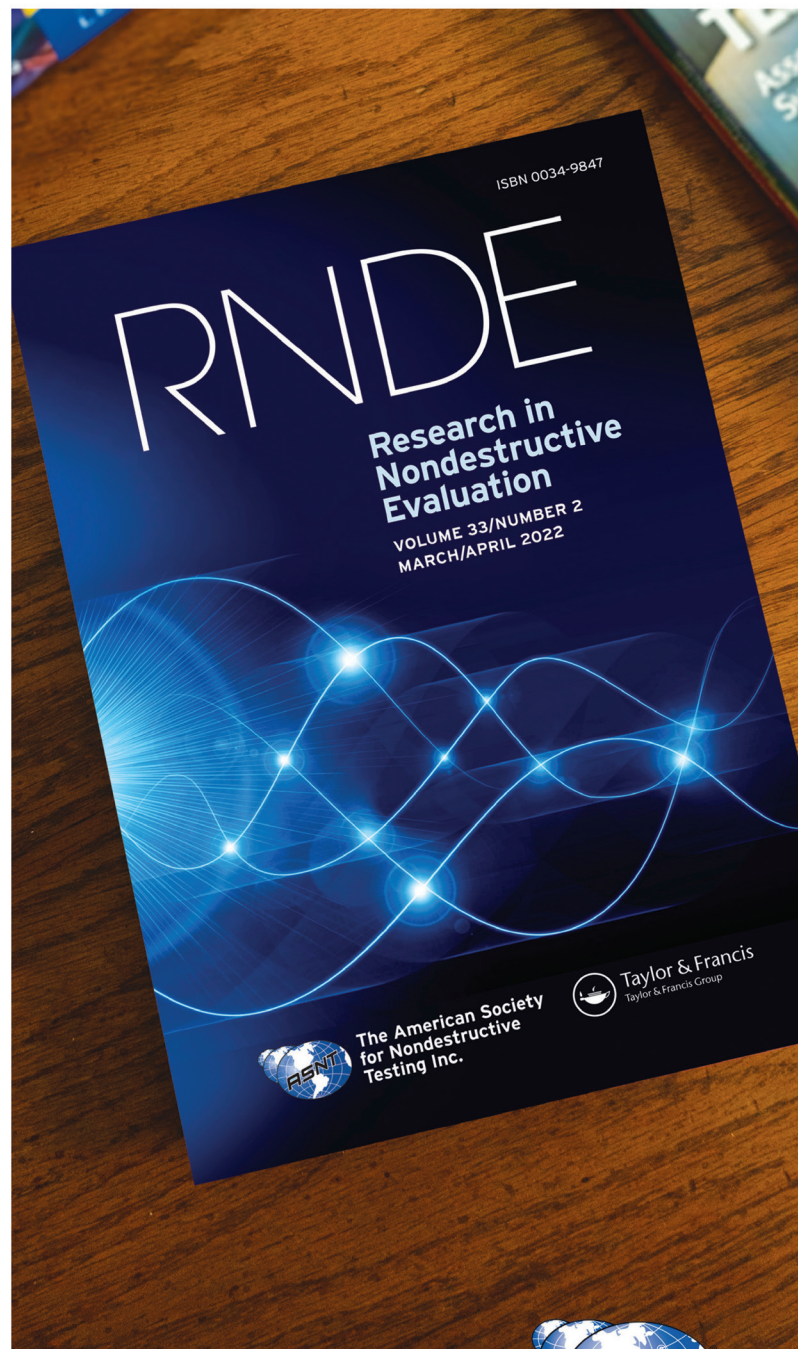
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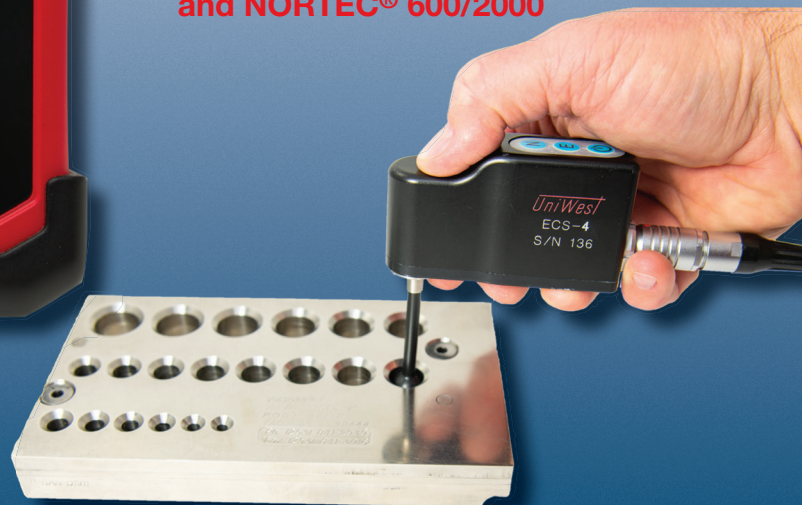
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