



Data Science and AI Regulatory Applications Workshop Future Focused Initiatives Opening Remarks

November 9, 2021

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Data Science and Artificial Intelligence

The nuclear industry is investigating and using artificial intelligence applications

The NRC recognizes a need to use data analytics and artificial intelligence for regulatory decisionmaking

The NRC must be prepared to understand and evaluate these technologies

**DATA SCIENCE AND ARTIFICIAL INTELLIGENCE
REGULATORY APPLICATIONS WORKSHOPS**

Virtual - Microsoft Teams Meeting

Website: <https://www.nrc.gov/public-involve/conferences.html>

NRCAIWorkshop@nrc.gov



Time (Eastern)	Topic	Presenter
10:00 a.m. – 10:20 a.m.	Introduction and Regulatory Purpose	Theresa Lalain (NRC)
10:20 a.m. – 10:40 a.m.	NRC Future Focused Research Program	Robert Tregoning (NRC)
10:40 a.m. – 11:00 a.m.	INL AI R&D Activities	Chris Ritter (Idaho National Laboratory)
11:00 a.m. – 11:20 a.m.	SNL AI R&D Activities	John Feddema, Stephen Kleban (Sandia National Laboratories)
11:20 a.m. – 11:40 p.m.	ANL AI R&D Activities	Rick Vilim (Argonne National Laboratory)
11:40 a.m. – 12:00 p.m.	Machine Learning for Safeguarding Nuclear Materials	Nathan Shoman (Sandia National Laboratories)
12:00 p.m. – 1:00 p.m.	Break	
1:00 p.m. – 1:20 p.m.	Nuclear Applications of Large Language Models	Jerrold Vincent, Bradley Fox (NuclearN)
1:20 p.m. – 1:40 p.m.	Hybrid Physics-Data Driven Model for Prescriptive Control and Design	Satyan Bhongale (X-Energy)
1:40 p.m. – 2:00 p.m.	CAP Automation and Informed Inspection Preparation Project - Update	Tim Alvey (Exelon Nuclear Innovation Group) Drew Miller (Jensen Hughes) Ahmad Al Rashdan (Idaho National Laboratory)
2:00 p.m. – 2:45 p.m.	Panel Session	Thiago Seuaciuc-Osorio (EPRI) Curtis Smith (INL) James Slider (Nuclear Energy Institute) Luis Betancourt (NRC)
2:45 p.m. – 3:00 p.m.	Executive Summary and Path Forward	