American-Made Challenges E-ROBOT Prize Competition
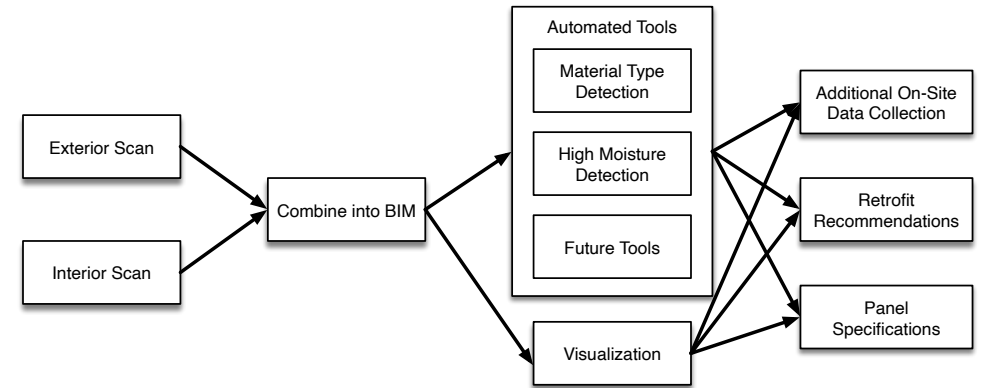
Our Shared Future

Need:

Our team is developing a new approach for evaluating a building for an envelope retrofit that is faster, safer, more scalable, more economical, and more accurate than current approaches. It is of particular value for taller buildings.

Proposed Solution:

Our approach combines the latest commercial sensing capabilities (color, Lidar, IR), drones, and data modeling to collect a high-value dataset and then applies custom machine learning and pattern recognition software to automatically process that dataset and produce retrofit recommendations.

Team:

Our team consists of building science professionals, engineers, scientists, and business professionals who can help bring this technology forward.

- Alan J. Vayda, Ph.D., Captain
- Devon Basher
- Gahl Spanier
- Peng Zhang
- Kempton Van Hoff
- Jason Knowlden