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Research Interests

- Advanced manufacturing
- Industry 4.0
- Human-robot-machine interaction
- Physics-based/data-driven modeling
- Manufacturing process monitoring
- Industrial automation



Links of Interest



[Dr. Nguyen's Faculty Profile](#)



[Institute of Computing and Cybersystems](#)



Research Synopsis



Mixed Reality Human-Robot Interaction for Assembly Operations

Develop augmented reality and virtual reality interfaces for accessible human-assisted robotic assembly operations.

Automated Data Preparation for Automatic Machine Learning Development

Enable automatically generated machine learning models by investigating optimization algorithms to clean and process data.

Multimodal Interpretable AI Models using Big Data from Production

Develop frameworks for interpreting AI using diverse big data naturally collected in production

Qualification of Hybrid Additive/Subtractive Robotic Systems

Evaluate novel metrology methods for combined robotic-based metal 3D printing and machining processes.

Test Artifacts for Automated Driving

Investigate test methods and metrics to evaluate the construction of HD maps for mobile robot perception technology.

[ICC] Institute of Computing and Cybersystems

For more information



[Automation in Manufacturing and Industrial Systems Lab](#)



[Publications](#)

