

SMART²



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Smart Manufacturing for America's Revolutionizing Technological Transformation



Join us for train-the-trainer workshops, visit website for registration.

- Next workshop will be virtual on December 17-18th, 2020.
- Each participant receives a Codeprogrammed drone and \$400 Stipend

Project goals:

- Goal 1: To Increase Workforce Development Tools
- Goal 2: To Identify the Skill Sets and Needs of SM Professionals
- **Goal 3:** Develop an SM repository that serves as a knowledge base for the practitioners and STEM educators
- Goal 4: Increasing the Awareness of Smart Manufacturing
- **Goal 5:** Developing a Knowledgebase of Best Practices for the Industrial Assessment Centers



















- Visit our website: Six Online Educational modules on Smart Manufacturing,
- Industrial speaker short talks that present the State-of-the-art Industrial Applications

Products and Publications:

- Tantawi, Khalid; Sokolov, A.; Tantawi, O. "Advances in Industrial Robotics: From Industry 3.0 Automation to Industry 4.0 Collaboration," 2019 4th Technology Innovation Management and Engineering Science International Conference (TIMES-iCON), 2019. doi:10.1109/TIMES -iCON47539.2019.9024658
- Musa, Y.; Tantawi, O.; Bush, V.; Johnson, B.; Dixon, N; Kirk, W.; Tantawi, K. "Low-Cost Remote Supervisory Control System for an Industrial Process using Profibus and Profinet," *IEEE SoutheastCon*, 2019. doi:10.1109/ SoutheastCon42311.2019.9020630
- Terry, Shane and Fidan, Ismail and Zhang, Yunbo and and Tantawi, Khalid. "Smart Manufacturing for Energy Conservation and Savings," 2019 NSF ATE Principal Investigators Conference, v.Demonst, 2019.
- Terry, Shane; Lu, H.; Fidan, Ismail; Zhang, Y.; Tantawi, Khalid; Guo, Terry; Asiabanpour, Bahram. "The Influence of Smart Manufacturing Towards Energy Conservation: A Review," *Technologies*, v.8, 2020. <u>doi:10.3390/technologies8020031</u>
- Arnold, Ryan; Fidan, Ismail; Tantawi, Khalid. "Transforming Industry towards Smart Manufacturing in the United States," *National NSF-ATE Conference*, 2018.
- Musa, Yasmin; Tantawi, O.; Tantawi, K. "Low-Cost Remote Supervisory Control System for an Industrial Process," *NSF-ATE National Conference*, 2018. doi:10.13140/RG.2.2.26973.84962
- Tantawi, K.; Fidan, I.; Tantawy, A. "Status of Smart Manufacturing in the United States," *SoutheastCon*, 2019. <u>doi:10.1109/SoutheastCon42311.2019.9020330</u>