

YUXIANG LUO

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Education

The Ohio State University	Columbus, Ohio, United States
Computer Science and Engineering, B.S, Ph.D.	2017 - 2025
Welding Engineering, MSE, M.S.	2020 - 2023
Harbin University of Science and Technology	Harbin, China
Computer Science and Technology	2015 - 2017

Research Projects

Process-Procedure-Property Optimization Based on Finite Element Model April, 2019 - Current
 Research Assistance - Dr. Andrew Perrault Computer Science and Engineering, The Ohio State University
 Use machine learning algorithm to optimize sequential processes that are common in industrial generation activities using Finite Element Model based simulation.

Temper Bead Welding April, 2019 - August, 2023
 Research Assistance - Dr. Boian Alexandrov Welding Engineering, MSE, The Ohio State University
 Created a Finite Element Analysis(FEA) model, Design of Experiment(DoE) and Bayesian Optimization to simulate and optimize the process of temper bead welding.

Publications

Luo, Yuxiang. "**Process Optimization Framework for Temper Bead Welding Procedures.**" Ohio State University, Master's thesis. OhioLINK Electronic Theses and Dissertations Center. 2023.

Jang, E, Luo, Y, Alexandrov, B, McCracken, SL, Tatman, J, & Barborak, D. "**Quantification of the Tempering Response for Temper Bead Welding of SA-508 Low Alloy Steel.**" Proceedings of the . Volume 1: Codes and Standards. Las Vegas, Nevada, USA. July 17–22, 2022. V001T01A079.

E. Jang, J. Stewart, Y. Luo, S. Qu, B. Alexandrov, S. L. McCracken, J. Tatman, D. Barborak, and J. A. Penso, "**Tempering Efficiency Evaluation for Dissimilar Weld Overlays**" Pressure Vessels and Piping Conference, vol. 83815. American Society of Mechanical Engineers, 2020, p.V001T01A098.

Y. Luo, C. Zhang, Y. Zhang, C. Zuo, D. Xuan, Z. Lin, A. C. Champion, and N. Shroff, "**Acoustic-turf: Acoustic-based Privacy-preserving Covid-19 Contact Tracing**" ArXiv, 2020.

Presentations

Modelling and Validation of Temper Bead Weld Overlays	Ma ² JIC, 2020~2023
Temper Bead Welding	AWS FABTECH, 2020
FEA Model Based Simulation of Tempepr Bead Welding	AWS PROFESSIONAL, 2021
Automated Heat Source Calibration for Welding Processes	AWAMR, 2022