

**Virginia State University Outstanding Faculty Award 2021-2022**

**Outstanding Research/Scholarship Star Award**

**Zhenhua Xu, PhD**

**Associate Professor, Department of Engineering**

**College Of Engineering Technology**

Dr. Zhenhua Wu is currently an Associate Professor of Manufacturing Engineering in the College of Engineering and Technology at Virginia State University (VSU). During his tenure at VSU, Dr. Wu undertakes research with faith, educates students with hope, and serves communities with love. He has contributed significantly to Manufacturing Engineering Research as well as to VSU's mission in teaching and service.

Dr. Wu was a key member of the VSU representative team to Commonwealth Center for Advanced Manufacturing (CCAM). As the PI, Dr. Wu has secured funding from NSF, DoD, ONR, NASA, VSU CAREO, and industrial sponsors. Through these supports, Dr. Wu has established the VSU Cybermanufacturing Laboratory (<https://vsucybermanu.wixsite.com/home>) to address the local and national needs in the areas of smart manufacturing, automation, sustainable manufacturing, and product life cycle engineering. This lab also serves as a magnet for attracting and training the next generation of game-changers in manufacturing. Over 20 undergraduate students have received rigorous training in his research program. Dr. Wu is very proud of his students. They have won many prestigious prizes including, the Second Place at the 2015 WBHR-LSAMP Research Symposium, the Runner Up at the 2017 NIST-NSF-ASTM-ASME Reusable Abstractions of Manufacturing Processes (RAMP) competition, and the Third Place at the 2019 Research Symposium of the Association of 1890 Research Directors (ARD Research Symposium), etc. Most of the student researchers upon graduation received employment from Deloitte, Newport News Shipbuilding, Microsoft, Lockheed Martin, Huntington Ingalls, Aerospace Corporation, and etc. Dr. Wu's research outcomes have been extensively published in the leading manufacturing journals and proceedings, such as *International Journal of Advanced Manufacturing Technology*, *Journal of Manufacturing Processes*, *Journal of Manufacturing Systems*, *Manufacturing Letters*, *ASME Manufacturing Science and Engineering Conference*, etc. Dr. Wu applied the research results in curriculum improvement, he developed a new lecture course entitled "Design and Manufacturing for Aerospace Industry" and two lab courses for the "Manufacturing Processes" and "Manufacturing Automation" lecture courses. In his research program, he has engaged and supported research activities for faculty members from VSU, ODU, and Virginia Tech.

Since 2015, Dr. Wu has been invited to service as an Officer in the Manufacturing Engineering Division of American Society Engineering for Engineering Education (ASEE). He the current Associate Program Chair for the Division. He will be the Chair-Elect/Program Chair in the 2022-2023 academic year. Because of his significant contribution to manufacturing engineering education, he was awarded the "Outstanding Junior Faculty" by the ASEE Manufacturing Division in 2021. He has also served numerous times as a reviewer and an organizer for scholarly journals and conferences.

In summary, Dr. Wu has demonstrated significant success and leadership in technical research and innovative capabilities in Manufacturing Engineering. He is dedicated to the students' success. He also has engaged and contributed for his peer faculty members' research activities.