

Evaluating the Student and Faculty MyMU Portal Interface at Methodist University

Sarah Davis, Kalkidan Gebrehiwot, Dr. Denise H. Bauer, and Dr. Girish Upreti

Department of Engineering, Industrial and Systems Engineering

Methodist University

Fayetteville, North Carolina 28311, USA

sdavis19@student.methodist.edu, kgebrehiwot19@student.methodist.edu,

dbauer@methodist.edu, gupreti@methodist.edu

Abstract

The Methodist portal, myMU, is a platform used at MU that allows students, faculty, and parents to access different resources and information. The portal serves both undergraduate and graduate students, which also includes online students. Many of our peers have mentioned that the interface could be daunting for first-time users and lacks instructions on how to navigate each tab. Recently, there have been updates to the student portal and one of the goals they were able to achieve was downsizing the student portal from 18 to 8 tabs. However, the faculty portal has not been revised; we hope to help streamline it. This research aims to evaluate both the student and faculty portals to enhance user experience through user surveys/focus groups and by incorporating the International Standards Organization (ISO) standard ISO 9241, which addresses the accessibility of interactive systems to meet the needs of users.

Keywords

User Interface, Process Improvement, Accessibility and User Experience.

Biographies

Sarah Davis is a Methodist University senior from King and Queen County, Virginia, USA. She will be graduating with a Bachelor of Science in Engineering with a concentration in Industrial and Systems Engineering in May 2023. She has received the Engineering Service Award for all her hard work in the Engineering and IISE Club at Methodist University. She has been recognized with the Loudermilk and Networth scholarships. She is hoping to get a job after graduating from Methodist University and possibly getting her master's in engineering while working.

Kalkidan Gebrehiwot is a senior in Engineering with a concentration in Industrial and Systems Engineering at Methodist University. Kalkidan's academic achievements have earned her recognition, as she was awarded both the UWC and Davis scholarships. In the summer of 2021, Kalkidan significantly impacted her community through the Davis Peace Project using solar systems to generate electricity to access clean water and provide a sustainable solution to the locals. As a mentor at the Society of Ethiopian Women in STEM (SEWS), Kalkidan is dedicated to helping fellow STEM women navigate their career paths. After graduation, Kalkidan plans to work as a manager for Amazon, where she will bring her expertise in engineering, leadership skills, and passion for innovation to the company. After getting some industry experience, Kalkidan plans to pursue her master's degree in Operation Research and work on product planning and control.

Dr. Denise H. Bauer is a Professor of Engineering, Director and Chair of the Engineering Department, and Head of the Engineering and Environmental Studies Division at Methodist University. She has a B.S. in Engineering Science, Biomedical Engineering, and a M.S. in Industrial Engineering, Human Factors, both from The University of Tennessee, and earned her Ph.D. in Industrial Engineering, Human Factors/Ergonomics from Pennsylvania State University. She was also the recipient of the National Academy of Engineering Center for the Advancement of Scholarship on Engineering Education (NAE CASEE) post-doctoral fellowship to study what communication methods students used to communicate with group members during online classes and their feelings on their importance. Dr. Bauer has conducted research in human factors and ergonomics on the safety and comfort during backpack use,

specifically middle school and college students; safety of pedestrians, especially the seeing-impaired; and ergonomics of industrial tools. Her engineering education research includes the use of technology communication for remote engineering group work; improving the first-year experience, including a focus on engineering students that are underprepared in math; and student self-efficacy related to capstone courses. Dr. Bauer has taught engineering courses in all four years of the curriculum as well as graduate-level courses in the areas of engineering graphics, statics, dynamics, engineering design, work measurement and design, engineering probability and statistics, human factors and ergonomics, and operations research. She is a member of IISE and is a Certified Professional Ergonomist.

Dr. Girish Upreti is an Assistant Professor of Engineering at Methodist University. He also holds an M.S. in Statistics and Materials Science and Engineering from the University of Tennessee at Knoxville. In 2017, he received his Ph.D. in Industrial and Systems Engineering from the University of Tennessee, Knoxville. After completing his Ph.D. program, Dr. Upreti worked as a Performance Improvement Coordinator at St. Luke's Health Systems of Idaho from 2017-2019. He was involved in various process improvement activities within the healthcare system. His research interests are lean, supply chain, life cycle analysis, data analytics, and energy policy analysis. Dr. Upreti is on the editorial board of several journals and holds the Lean Six Sigma Black Belt.