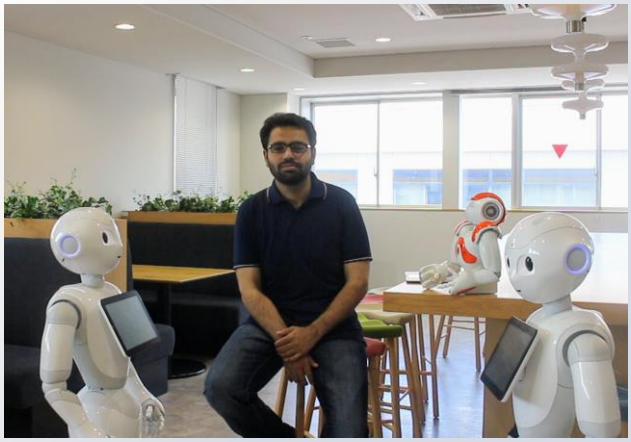
Organizer:
IEEE Robotics and Automation Chapter
Eastern North Carolina Section

Presenter:
Dr. Ahmed. H. Qureshi

Location:
Online and Live streaming in EB3 4142



Visual Robot Learning for Planning & Control in Unknown Environments

17 Mar 2022 12:00PM

Webinar by Dr. Ahmed. H. Qureshi
Professor, Dept. of Computer Science, Purdue University

Abstract: Autonomous robots will soon play a significant role in various domains, such as search-and-rescue, agriculture farms, homes, offices, transportation, and medical surgery, where fast, safe, and optimal response to different situations will be critical. However, to do so, these robots need fast algorithms to plan their task and motion sequences in real-time with limited perception and battery life. This talk will discuss the novel, learning-based methods for scalable robot task and motion planning that emerged from the cross-fertilization of classical planning and machine learning techniques. These methods can achieve unprecedented speed, robustness, and generalization for solving complex problems in cluttered and partially observable environments.

Biography: Ahmed Qureshi is an Assistant Professor in the Department of Computer Science at Purdue University, where he directs the *Cognitive Robot Autonomy and Learning (CoRAL)* Lab. His group performs fundamental and applied research in machine learning, computer vision, and artificial intelligence to design and develop intelligent robotic systems. His work touches on various problems, including dexterous manipulation and control, mobile navigation, human-robot collaboration, autonomous driving, and healthcare. Previously, he received a B.S. in Electrical Engineering from NUST, Pakistan, an M.S. in Engineering from Osaka University, Japan, and a Ph.D. in Intelligent Systems, Robotics, and Control from the University of California San Diego.

Registration Link: https://events.vtools.ieee.org/event/register/306026

Webinar also will be lively streamed on EB3 Room 4142. Free snacks will be available.