CCSU
DEPARTMENT OF MATHEMATICAL SCIENCES
COLLOQUIUM

Friday, September 15
3:15 – 4:15 PM
Maria Sanford, Room 101

ROBOT ORIENTATION

OSCAR PERDOMO

CENTRAL CONNECTICUT STATE UNIVERSITY

Abstract: The group of 3 by 3 special orthogonal matrices is used to describe the orientation of a robot. In this talk we explain the concept of robot's orientation. We will cover the following three well-known basic forms to represent the orientation of a robot: the Euler angles, the rotation vector, and the quaternions.

After explaining the intuition behind each representation, we provide algorithms to find the special orthogonal matrix associated with each representation.
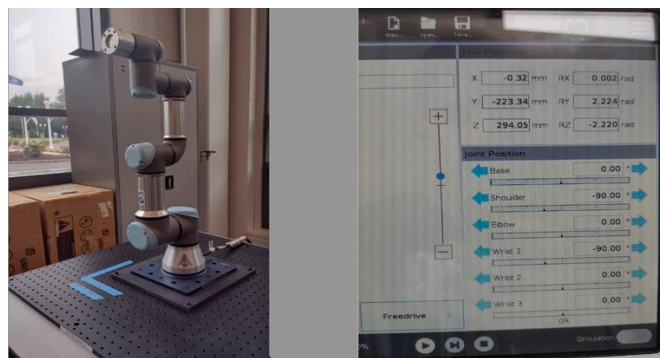
To join us online use the following link: https://ccsu.webex.com/meet/gotchev
For further information: gotchevi@ccsu.edu; 860-832-2839;
http://mathcolloquium.sites.ccsu.edu/