

Toward Better Human Robotic Systems

MICHAEL LYNN\textsuperscript{1}, Stephen F. Austin State University — The discovery of twisted coiled polymer actuators at UTD kicked off a whole new race in linear actuator technology. SFA will be extending the work done by UT et al. by introducing novel materials and manufacturing methods to the field of twisted coiled polymer actuators in the near future. Characterization experiments will be performed and fully automated manufacturing techniques quality tested for improvements in volume throughput and product reliability. SFA will search for the most efficient automatic processing method to produce twisted polymer actuators, whose properties approach commercial viability and prove a significant step forward in the field of biomimetic artificial muscles.

\textsuperscript{1}This is a talk about the general state of the field and the entry that Stephen F. Austin is making into the research space.