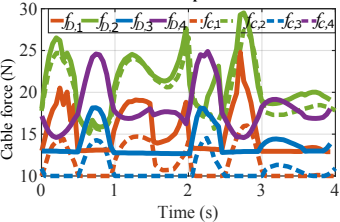
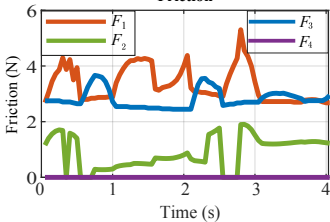


CWGID and friction compensated cable force



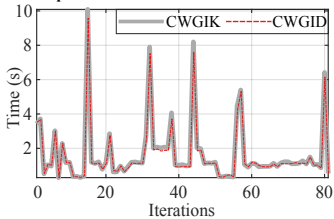
(a) Cable force generated from CWGID.

Friction



(b) Friction trajectory

Computation time for CWGIK and CWGID



(c) Computation time trajectory

































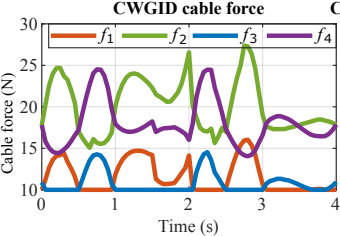




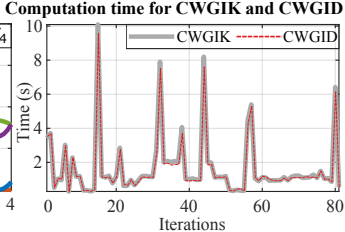








(a) Cable force generated from CWGID.



(b) Computation time trajectory











































































