

Constant Length Tendon Routing Mechanism through Axial Joint

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- Concept idea, **design** and **prototyping** of a novel tendon routing mechanism through pronation-supination (forearm) joint for **backdrivable robot arms**.
- Routings for **4 wrist tendons** simultaneously through a 1 DOF axial joint with range of $\pm 180^\circ$.
- Exploits a **moving pulley system** to achieve constant length and thus, **full decoupling** between axial joint and tendon motions.

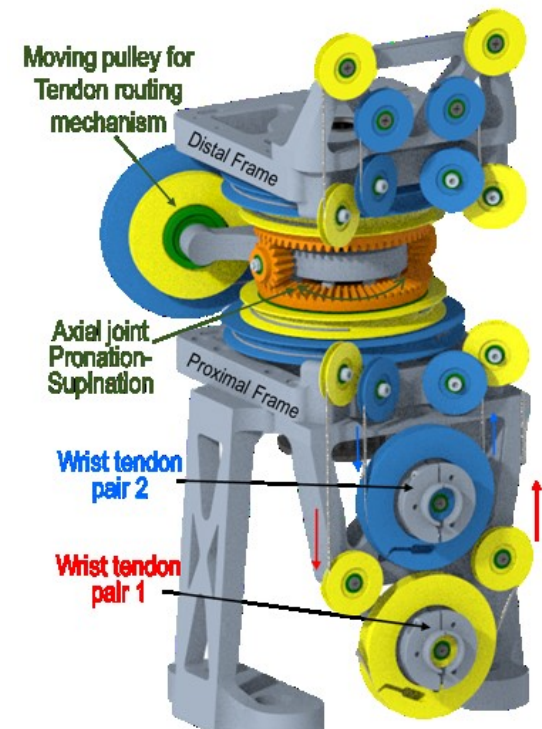


Fig. CAD Model