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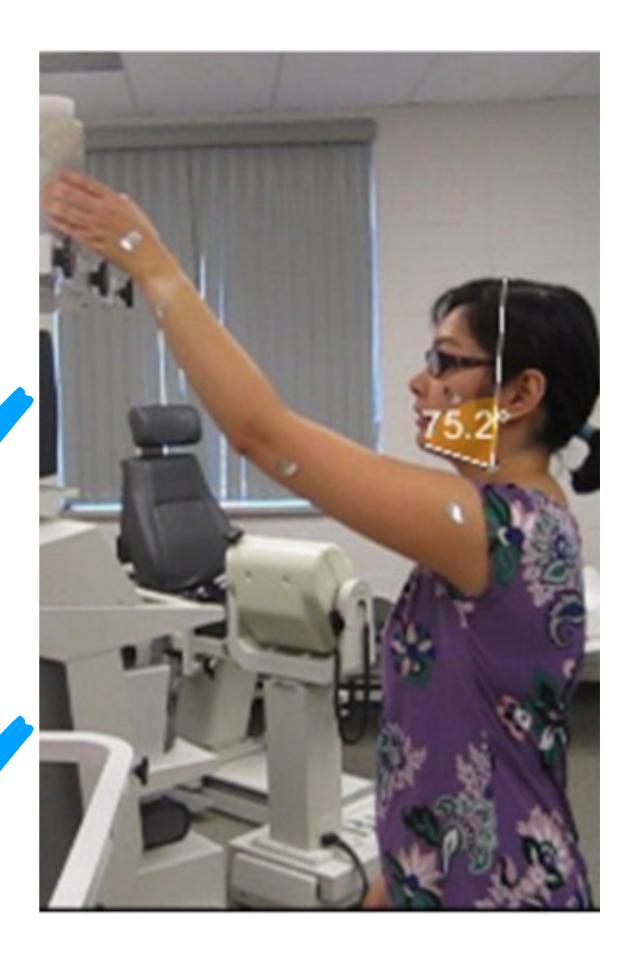




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Prior work: tendon driven limbs == robotic limbs

'Revolute mechanical linkages'

- Valero-Cuevas, F. J., Johanson, M. E., & Towles, J. D. (2003a). Towards a realistic biomechanical model of the thumb: the choice of kinematic description may be more critical than the solution method or the variability/uncertainty of musculoskeletal parameters. Journal of Biomechanics, 36(7), 1019–1030. http://doi.org/10.1016/S0021-9290(03)00061-7
- Valero-Cuevas, F. J., Smaby, N., Venkadesan, M., Peterson, M., & Wright, T. (2003b). The strength– dexterity test as a measure of dynamic pinch performance. Journal of Biomechanics, 36(2), 265–270. http://doi.org/10.1016/ S0021-9290(02)00340-8
- Venkadesan, M., & Valero-Cuevas, F. J. (2008).
 Neural Control of Motion-to-Force Transitions with the Fingertip. Journal of Neuroscience, 28(6), 1366–1373. http://doi.org/10.1523/JNEUROSCI. 4993-07.2008
- Venkadesan, M., & Valero-Cuevas, F. J. (2009).
 Effects of neuromuscular lags on controlling contact transitions. Philosophical Transactions of the Royal Society a: Mathematical, Physical and Engineering Sciences, 367(1891), 1163–1179.
 http://doi.org/10.1098/rsta.2008.0261