Using Template Models to Identify Exoskeleton User Intent Grant: IIS-1734532

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Detecting Intent Change via Onboard Sensors

Dataset available:

• [Gambon et al., *IEEE Access*, 2020]

Past work:

- 78% accurate
- 70 steps of training data
- [Karulkar and Wensing, IEEE RA-L, 2021]







Addressing Data Scarcity & Personalizing Estimation





Quantifying the Quality of the Pooling Process



- Pooled data
 - Desired velocity Z
 - Gait features Q



Does Data Augmentation Work?





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