

Project proposal



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Investigation of asymmetric Gait Pattern Adaptations for Walking with a constrained Ankle



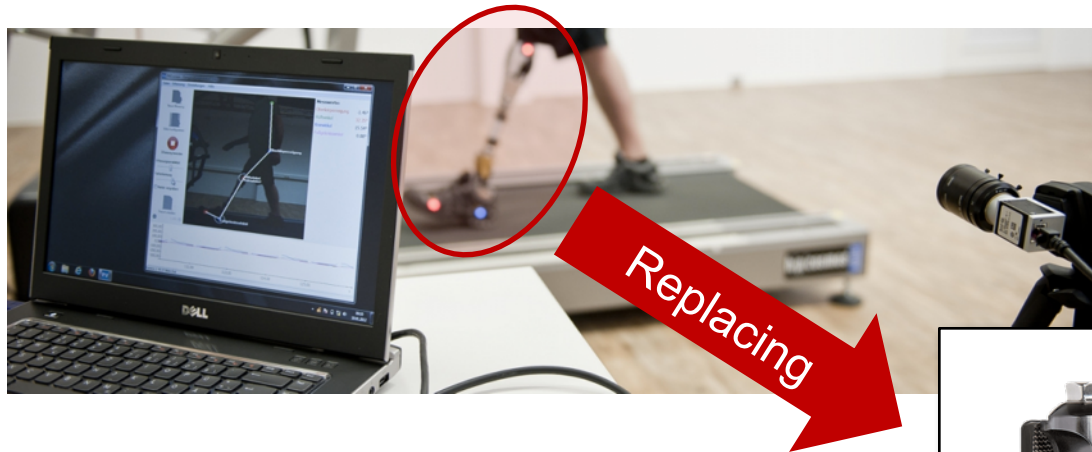
Motivation

People who suffer from unilateral transtibial amputations show asymmetric gait patterns which result in

- Increased metabolic expenditure during walking
- Decreased walking speeds
- Unbalanced loading conditions → secondary diseases



Investigation of asymmetric Gait Pattern Adaptations for Walking with a constrained Ankle



Investigation of asymmetric Gait Pattern Adaptations for Walking with a constrained Ankle

- Conducting experiments with a constrained ankle joint
- Data processing
- Calculation and Analysis of different metrics (e.g. step times, step lengths etc.)
- Comparison to transtibial amputees (prior works exists)

