

Model-based Methods

Chapter 3

Low-speed Gait Search
B-SLIP Gait Library
Interacting Multi-Model
Estimation

Using gait feature
and gait speed
relationships for
predictive estimation

Chapter 4

Data-driven
Gait Feature Models
Predictions made at TD
Buttressed Kalman Filter

Addressing the scarcity
of training data

Chapter 5

Pooling Data from Uninjured
and Injured Users
Mutual Information-based
data selection

Learning-based Methods