

Unobtrusive Authentication in Mobile Security

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The big picture

What is Mobile Security?

- Information Storage
- Device Access

How can mobile security get better?

- No More Passwords
- Something You Are
- Unobtrusive Access



Outline

- 1 Background
- 2 Preprocessing the data
- 3 Feature Extraction
- 4 Analyzing Gait data
- 5 Results

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Background

- Biometrics
- Gait Recognition
- Using Gait is Better

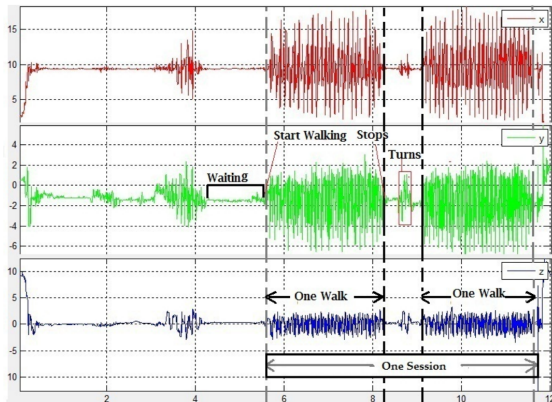


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 - Fixed Preprocessing
 - Unfixed Preprocessing
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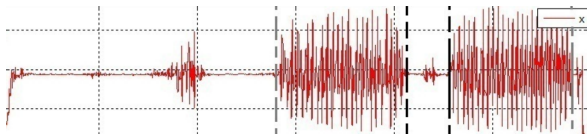
Experiment Environment

- Phone Clipped to Waist
- Walked Down 18.5 Meter Hallway
- Preprocessing



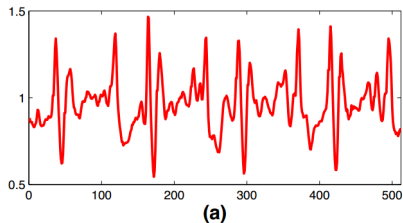
Linear Interpolation and Zero Normalization

- Walk Extraction
- Linear Interpolation
- Zero Normalization

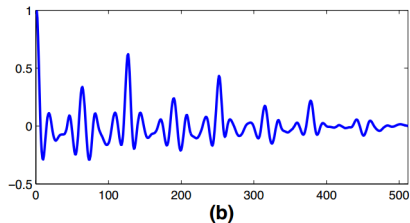


Framing and Projection

- Framing



- Projection



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Conclusions

References