Remote Coaching Solution
(WERCware)
Sensor and System Integration

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WERCware seeks to provide a stress management and monitoring solution for people challenged with developmental disabilities. The objectives are to

- Reduce cost for coaching services
- Provide greater independence
- Improve employability
Nancy Patrick, Ph.D.

- Director of the Graduate Program in Education at Messiah College
- Professor of psychology
- Behavior specialist
- School psychologist
- Autism specialist
- Author of several books
WERCware Solution

Stress Detection → Automatic Video Call to Coach → Intervention

Privacy Shutoff
Stress Detection

Voice Analysis

• Data Classification (ANN)
  • Male vs. Female Detection (95%)
  • Stressed vs. Not-Stressed (85%)
• Real-time detection
  • Intel Edison Microprocessor
Stress Detection

Non-Real-Time Processing

Voice Recording → ANN → Determination
Stress Detection

Non-Real-Time Processing

Voice Recording → ANN → Determination

Java Program
Stress Detection

Real-Time Processing
System Integration

App Development

- Audio Recording
- Video and Voice Calling (Twilio)
- Bluetooth Streaming
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Dr. Nancy Patrick

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Questions

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