Wearable and Ambient Sensing for Well-being and Emotional Awareness in the Smart Workplace

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Introduction

- **Wearable Technology** becomes increasingly available and socially accepted for ubiquitous data collection.
- Time we spent at work is big part of our life and has impact on our well-being.
- Stress - common problem at workplaces.

Approach

- Aml at Workplace
- Wearable Tech
- Wellbeing and Stress Management

Stress

- **Demands** outweigh the resources
- **Fight or Flight** Reaction
- Long Term Negative Effects: Heart Disease, Depression, ...

How can we measure stress?

**Electrodermal Activity (EDA, GSR)**
- Electrical properties of skin
- Indicate arousal and emotional states

**Heart Rate Variability (HRV)**
- Variability of the inter-heart-beat intervals
- Is low in high arousal states

Research Questions

- What are the requirements at the workplace regarding stress and emotional wellbeing?
- How can we measure stress and influencing factors at the workplace with ambient and wearable sensing?
- What ambient and wearable feedback to positively influence stress and well-being at the workplace?

Progress

- Survey on perception of workplace stress, stress factors and technology/wearable support
- Preparation of study evaluating Apple Watch as predictor of current mood and stress

Vision

[Diagram showing a workplace with individuals and technology]

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