

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



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

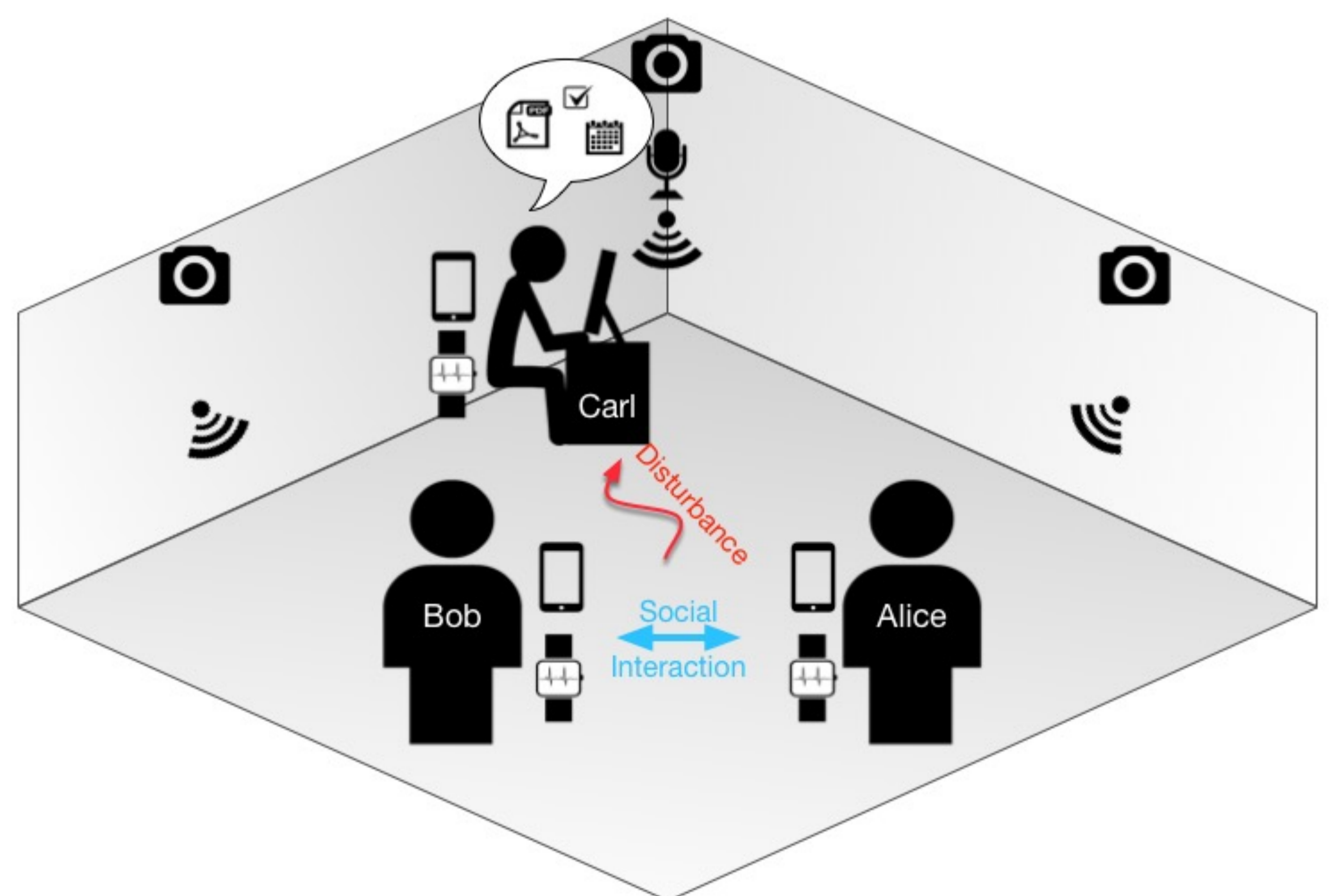
Research Questions

- 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



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