



# Wearable Computing

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## Context

# Sensors

- ▶ Sensors
  - ▶ Integration into wearables
  - ▶ Sensor Types
  - ▶ Details: position

# What do we know so far?

- ▶ History, Terminology
- ▶ Hardware: input, output, . . .
- ▶ Methods, Usability, Differences to Desktop
- ▶ Now we can get started!

# What makes the wearable different?

- ▶ Supporting a primary task!
- ▶ How do we do this?
- ▶ Context

# Context

- ▶ Task Context
- ▶ User Context
- ▶ Environmental Context

# Context sources

- ▶ Prior knowledge
- ▶ Asking the user
- ▶ Sensors
- ▶ Other systems

# Handling Context

- ▶ Context is knowledge
- ▶ Context has both a qualitative and quantitative nature
- ▶ Sensors give only quantitative information
- ▶ Problem: Making qualitative from quantitative information
- ▶ One solution: Supervised machine learning
- ▶ Better methods?



# Using Context

- ▶ Query-based
- ▶ Event-based
- ▶ Context specification
- ▶ Learning context while using it ?

# Summary

- ▶ Context
  - ▶ Sources
  - ▶ Handling Context
  - ▶ Using Context