



University of Kaiserslautern
Departments of Electrical and Computer Engineering,
Computer Science, Mechanical and Process
Engineering, Mathematics, Social Sciences

Research Center

Ambient Intelligence





What is „Ambient Intelligence“ ?

ambient
INTELLIGENCE



Scenarios:

- *human centered manufacturing*
- *paperless electrical field installation*
- *adaptive illumination of workplaces and human cognition*
- *assisted living*
- *optimal growth and crop in agriculture, viniculture*



**Enhanced Quality-of-life
(work, health, leisure, ...)**





Technological Requirements



requirements

unobtrusive hardware

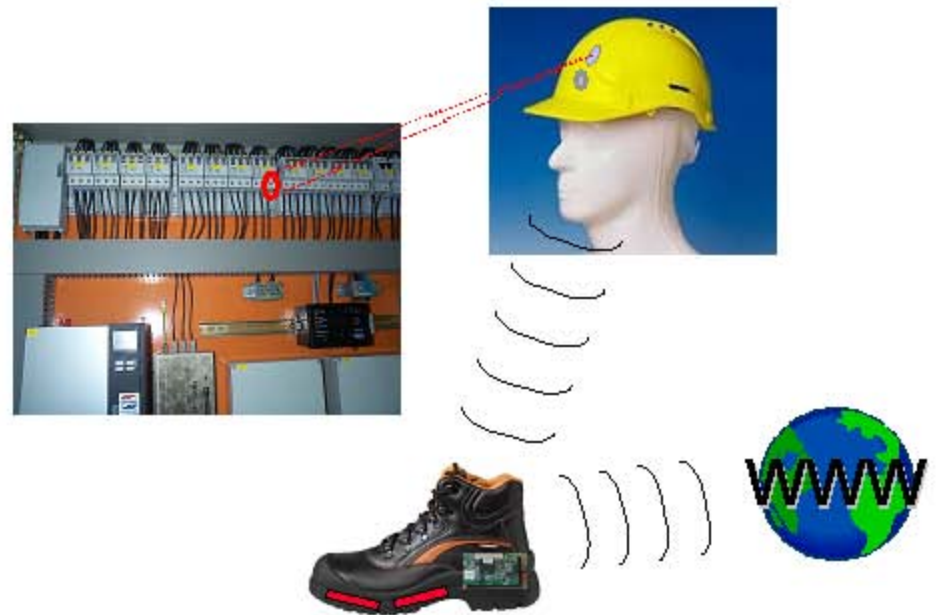
hardware dependent software

seamless communication

dynamic, massively distributed networks

natural feeling human interface

dependability and security





Structure



research clusters	embedded HW/SW	system integration	human interaction
requirements			
unobtrusive hardware	X		X
hardware dependent software	X		
seamless communication	X	X	
dynamic, massively distributed networks		X	
natural feeling human interface			X
dependability and security	X	X	X



○ Interdisciplinary Group of Researchers

- | | |
|------------------------------------|-------------------------------------|
| ⇒ Prof. Dr. Dutke | Social Sciences |
| ⇒ Jun. Prof. Dr. Frey | Electrical and Computer Engineering |
| ⇒ Prof. Dr. Gotzhein | Computer Science |
| ⇒ Prof. Dr. König | Electrical and Computer Engineering |
| ⇒ Prof. Dr. Kunz | Electrical and Computer Engineering |
| ⇒ Prof. Dr. Litz (Chair) | Electrical and Computer Engineering |
| ⇒ H.-Doz. Dr. Michel | Mathematics |
| ⇒ Prof. Dr. Rombach | Computer Science |
| ⇒ Prof. Dr. Schürmann | Computer Science |
| ⇒ Prof. Dr. Tielert | Electrical and Computer Engineering |
| ⇒ Prof. Dr. Urbansky | Electrical and Computer Engineering |
| ⇒ Prof. Dr. Wehn (Co-Chair) | Electrical and Computer Engineering |
| ⇒ Prof. Dr. Weiß | Electrical and Computer Engineering |
| ⇒ Prof. Dr. Zengerle | Electrical and Computer Engineering |
| ⇒ Prof. Dr. Zühlke | Mechanical and Process Engineering |