

Pervasive technology

readings:

mandatory:

- Klann, M.: *Tactical Navigation Support for Firefighters: The LifeNet Ad-Hoc Sensor-Network and Wearable System*, 2009
- Ley, B., Ludwig, T., Pipek, V., Randall, D., Reuter, C. & Wiedenhofer, T.: *Information and Expertise Sharing in Inter-Organizational Crisis Management*, 2014
- Korhonen, I. & Bardram, J.E. : *Introduction to this special issue on Pervasive healthcare*, 2004

additional readings:

- Bardram, J.E. & Christensen, H.B.: *Supporting Pervasive Collaboration in Healthcare — An Activity-Driven Computing Infrastructure*, 2004
- Bardram, J.E. & Bossen, C.: *Interwoven Artifacts — Coordinating Distributed Collaboration in Medical Care*, 2004
- Jiang, X, N.C. Chen, J.I. Hong, K. Wang & L. Takayama: *Siren: Context-Aware Computing for Firefighting*, 2004
- Desjardins, A., Greenberg, S., Wakkary, R. & Hambelton, J.: *Avalanche Beacon Parks: Skill Development and Team Coordination in a Technological Training Ground*, 2016
- Consolvo, S, Roessler, P, Shelton, BE, LaMarca, A, Schilit, B. & Bly, S. *Technology for Care Networks of Elders*, 2004
- Kientz, JA, Hayes, GR, Westeyn, TL, Starner, T. & Abowd, GD. *Pervasive Computing and Autism: Assisting Caregivers of Children with Special Needs*, 2007
- Klemets, J. & Kristiansen, L.: *A Pervasive System for Communicating Urgency Cues to Health Care Workers*, 2012

questions:

1. what sort of cscw system is *Siren*?
2. Ley et al discuss the challenges of collaborating across organizational borders. What do they see as the main difficulties?
3. how do they suggest to design for crisis management?
4. pervasive healthcare includes 1) applying pervasive technologies for health and healthcare and 2) making healthcare available everywhere, anytime for everyone. How do Korhonen and Bardram describe pervasive healthcare?
5. what are the main challenges for pervasive healthcare?
6. what is “tacit communication” and how can it be supported by IT?

follow-up questions

7. Klann compares *Siren* with FIRE, both addressing the extreme collaborative activity of rescuing fire fighters (and victims) from a fire. But the technical solutions are different. Is this because they see the work practices differently – or represent (model) them differently?
8. Klann argues for presenting fire fighters with as little information as possible. Why (because of fire fighting or cooperative work)? Do you agree? Jiang et al (additional readings) also write about the *Siren* system and argue for redundancy ...
9. Ley et al emphasize improvisation – why and how?
10. how is pervasive healthcare relevant for cscw? Would Schmidt & Bannon agree?

extra questions:

11. how can knowledge be shared between people and organizations?
12. what are the arguments in Jiang et al for redundancy and what sorts of redundancy do they argue for?
13. the additional readings describe less extreme environments, mainly health care. Will the concepts and arguments from Jiang et al be relevant for less dramatic environments?