

REFERENCES

- [1] W. Liu, X. Li, and D. Huang, "A survey on context awareness," in *Computer Science and Service System (CSSS), 2011 International Conference on*, 2011, pp. 144–147.
- [2] T. Hori, Y. Nishida, H. Aizawa, and N. Yamasaki, "Networked sensors for monitoring human behavior," in *Computational Intelligence in Robotics and Automation, 2003. Proceedings. 2003 IEEE International Symposium on*, 2003, vol. 2, pp. 900–905 vol.2.
- [3] E. Kim and J. Choi, "A Context Management System for Supporting Context-Aware Applications," in *Embedded and Ubiquitous Computing, 2008. EUC '08. IEEE/IFIP International Conference on*, 2008, vol. 2, pp. 577–582.
- [4] N. D. Rodríguez, M. P. Cuéllar, J. Lilius, and M. D. Calvo-Flores, "A Survey on Ontologies for Human Behavior Recognition," *ACM Comput Surv*, vol. 46, no. 4, pp. 43:1–43:33, Mar. 2014.
- [5] C.-H. Tsai, Y.-W. Bai, C.-A. Chu, C.-Y. Chung, and M.-B. Lin, "PIR-sensor-based lighting device with ultra-low standby power consumption," in *Instrumentation and Measurement Technology Conference (I2MTC), 2011 IEEE*, 2011, pp. 1–6.
- [6] R. Mittal and M. P. S. Bhatia, "Wireless sensor networks for monitoring the environmental activities," in *Computational Intelligence and Computing Research (ICCIC), 2010 IEEE International Conference on*, 2010, pp. 1–5.
- [7] Y. Raja Vara Prasad and P. Rajalakshmi, "Context aware building energy management system with heterogeneous wireless network architecture," in *Wireless and Mobile Networking Conference (WMNC), 2013 6th Joint IFIP*, 2013, pp. 1–8.
- [8] W. Liu, X. Li, and D. Huang, "A survey on context awareness," in *Computer Science and Service System (CSSS), 2011 International Conference on*, 2011, pp. 144–147.
- [9] J. Hong, E. Suh, and S.-J. Kim, "Context-aware systems: A literature review and classification," *Expert Syst. Appl.*, vol. 36, pp. 8509–8522, 2009.
- [10] J. I. Hong and J. A. Landay, "An infrastructure approach to context-aware computing," *Hum.-Comput. Interact.*, vol. 16, no. 2, pp. 287–303, 2001.
- [11] H. A. Duran-Limon, G. S. Blair, A. Friday, P. Grace, G. Samartzidis, T. Sivaharan, and M. Wu, "Context-aware middleware for pervasive and ad hoc environments," *Context Tech Rep*, 2003.
- [12] Y. Bai, H. Ji, Q. Han, J. Huang, and D. Qian, "MidCASE: a service oriented middleware enabling context awareness for smart environment," in *Multimedia and Ubiquitous Engineering, 2007. MUE'07. International Conference on*, 2007, pp. 946–951.
- [13] T. Gu, H. K. Pung, and D. Q. Zhang, "A service-oriented middleware for building context-aware services," *J. Netw. Comput. Appl.*, vol. 28, no. 1, pp. 1–18,

2005.

- [14] A. Ranganathan, J. Al-Muhtadi, S. Chetan, R. Campbell, and M. D. Mickunas, "Middlewhere: a middleware for location awareness in ubiquitous computing applications," in *Proceedings of the 5th ACM/IFIP/USENIX international conference on Middleware*, 2004, pp. 397–416.
- [15] J. Yu, Y. Huang, J. Cao, and X. Tao, "Middleware support for context-awareness in asynchronous pervasive computing environments," in *Embedded and Ubiquitous Computing (EUC), 2010 IEEE/IFIP 8th International Conference on*, 2010, pp. 136–143.
- [16] J. Viterbo, V. Sacramento, R. Rocha, G. Baptista, M. Malcher, and M. Endler, "A middleware architecture for context-aware and location-based mobile applications," in *Software Engineering Workshop, 2008. SEW'08. 32nd Annual IEEE*, 2008, pp. 52–61.
- [17] M. Chan, D. Estève, C. Escriba, and E. Campo, "A review of smart homes—Present state and future challenges," *Comput. Methods Programs Biomed.*, vol. 91, no. 1, pp. 55 – 81, 2008.
- [18] A. Saad al-sumaiti, M. H. Ahmed, and M. M. A. Salama, "Smart Home Activities: A Literature Review," *Electr. Power Compon. Syst.*, vol. 42, no. 3–4, pp. 294–305, 2014.
- [19] N. D. Rodríguez, M. P. Cuéllar, J. Lilius, and M. D. Calvo-Flores, "A Survey on Ontologies for Human Behavior Recognition," *ACM Comput Surv*, vol. 46, no. 4, pp. 43:1–43:33, Mar. 2014.
- [20] C. D. Kidd, R. Orr, G. D. Abowd, C. G. Atkeson, I. A. Essa, B. MacIntyre, E. Mynatt, T. E. Starner, and W. Newstetter, "The aware home: A living laboratory for ubiquitous computing research," in *Cooperative buildings. Integrating information, organizations, and architecture*, Springer, 1999, pp. 191–198.
- [21] X. Ying and X. Fu-yuan, "Research on context modeling based on ontology," in *Computational Intelligence for Modelling, Control and Automation, 2006 and International Conference on Intelligent Agents, Web Technologies and Internet Commerce, International Conference on*, 2006, pp. 188–188.
- [22] K.-E. Ko and K.-B. Sim, "Development of context aware system based on bayesian network driven context reasoning method and ontology context modeling," in *Control, Automation and Systems, 2008. ICCAS 2008. International Conference on*, 2008, pp. 2309–2313.
- [23] Y. Raja Vara Prasad and P. Rajalakshmi, "Context aware building energy management system with heterogeneous wireless network architecture," in *Wireless and Mobile Networking Conference (WMNC), 2013 6th Joint IFIP*, 2013, pp. 1–8.
- [24] T. Mo, W. Li, W. Chu, and Z. Wu, "CABS3: Context-Awareness based smart service system," in *Wireless Communications Networking and Mobile Computing (WiCOM), 2010 6th International Conference on*, 2010, pp. 1–4.
- [25] T. Ma, Y.-D. Kim, Q. Ma, M. Tang, and W. Zhou, "Context-aware implementation based on CBR for smart home," in *Wireless And Mobile Computing, Networking And Communications, 2005.(WiMob'2005), IEEE International*

Conference on, 2005, vol. 4, pp. 112–115.

[26] F. Gui, N. Zong, and M. Adjouadi, “Artificial Intelligence Approach of Context-Awareness Architecture for Mobile Computing,” in *Intelligent Systems Design and Applications, 2006. ISDA '06. Sixth International Conference on*, 2006, vol. 2, pp. 527–533.

[27] M. G. Al-Bashayreh, N. L. Hashim, and O. T. Khorma, “Towards successful design of context-aware application frameworks to develop mobile patient monitoring systems using wireless sensors,” in *Open Systems (ICOS), 2012 IEEE Conference on*, 2012, pp. 1–6.

[28] B. Schilit, N. Adams, and R. Want, “Context-aware computing applications,” in *Mobile Computing Systems and Applications, 1994. WMCSA 1994. First Workshop on*, 1994, pp. 85–90.

[29] E. Aarts and others, *Into ambient intelligence*. Springer, 2006.

[30] D. Salber, A. K. Dey, and G. D. Abowd, “The context toolkit: aiding the development of context-enabled applications,” in *Proceedings of the SIGCHI conference on Human Factors in Computing Systems*, 1999, pp. 434–441.

[31] P. Fahy and S. Clarke, “CASS—a middleware for mobile context-aware applications,” in *Workshop on context awareness, MobiSys*, 2004.

[32] H. Chen, T. Finin, and A. Joshi, *A context broker for building smart meeting rooms*. Defense Technical Information Center, 2004.

[33] H. Chen, T. Finin, and A. Joshi, “An intelligent broker for context-aware systems,” in *Adjunct proceedings of Ubicomp*, 2003, vol. 3, pp. 183–184.

[34] I. Y. Chen, S. J. Yang, and J. Zhang, “Ubiquitous provision of context aware web services,” in *Services Computing, 2006. SCC'06. IEEE International Conference on*, 2006, pp. 60–68.

[35] B. Schilit, N. Adams, and R. Want, “Context-Aware Computing Applications,” in *Mobile Computing Systems and Applications, 1994. WMCSA 1994. First Workshop on*, 1994, pp. 85–90.

[36] R. KOUSHAEIAN, “AN ONTOLOGY AND CONCEPTUAL GRAPH BASED BEST MATCHING ALGORITHM FOR CONTEXT-AWARE APPLICATIONS,” MIDDLE EAST TECHNICAL UNIVERSITY, 2011.

[37] J.-W. Chang and H.-J. Lee, “Context-Aware Architecture for Intelligent Application Services in Ubiquitous Computing,” in *Semantic Computing, 2007. ICSC 2007. International Conference on*, 2007, pp. 275–281.

[38] A. K. Dey, “Providing architectural support for building context-aware applications,” Georgia Institute of Technology, 2000.

[39] G. Chen, D. Kotz, and others, “A survey of context-aware mobile computing research,” Technical Report TR2000-381, Dept. of Computer Science, Dartmouth College, 2000.

[40] K. Feher, *RFID wireless 2G, 3G, 4G internet systems including Wi-Fi, Wi-Max, OFDM, CDMA, TDMA, GSM*. Google Patents, 2010.

[41] Z. Farid, R. Nordin, and M. Ismail, “Recent advances in wireless indoor localization techniques and system,” *J. Comput. Netw. Commun.*, vol. 2013, 2013.

- [42] P. Saint-Andre and J. Hodges, "Representation and Verification of Domain-Based Application Service Identity within Internet Public Key Infrastructure Using X.509 (PKIX) Certificates in the Context of Transport Layer Security (TLS)," 2011.
- [43] W. N. Schilit, "A system architecture for context-aware mobile computing," Columbia University, 1995.
- [44] J. I. Hong and J. A. Landay, "An Infrastructure Approach to Context-aware Computing," *Hum-Comput Interact*, vol. 16, no. 2, pp. 287–303, Dec. 2001.
- [45] C. G. Sahu and D. Adane, "A Survey on Context-Aware Middleware."
- [46] C. G. Sahu and D. Adane, "A Survey on Context-Aware Middleware."
- [47] H. Nakashima, H. Aghajan, and J. C. Augusto, *Handbook of ambient intelligence and smart environments*. Springer Science & Business Media, 2009.
- [48] D. Athanasopoulos, A. V. Zarras, V. Issarny, E. Pitoura, and P. Vassiliadis, "CoWSAMI: Interface-aware context gathering in ambient intelligence environments," *Pervasive Mob. Comput.*, vol. 4, no. 3, pp. 360–389, 2008.
- [49] A. Olaru, A. M. Florea, and A. E. F. Seghrouchni, "A context-aware multi-agent system as a middleware for ambient intelligence," *Mob. Netw. Appl.*, vol. 18, no. 3, pp. 429–443, 2013.
- [50] D. Preuveneers, J. Van den Bergh, D. Wagelaar, A. Georges, P. Rigole, T. Clerckx, Y. Berbers, K. Coninx, V. Jonckers, and K. De Bosschere, "Towards an extensible context ontology for ambient intelligence," in *Ambient intelligence*, Springer, 2004, pp. 148–159.
- [51] D. J. Cook, J. C. Augusto, and V. R. Jakkula, "Ambient intelligence: Technologies, applications, and opportunities," *Pervasive Mob. Comput.*, vol. 5, no. 4, pp. 277–298, 2009.
- [52] K. E. Kjaer, "A survey of context-aware middleware," in *Proceedings of the 25th conference on IASTED International Multi-Conference: Software Engineering*, 2007, pp. 148–155.