Abstract

Pervasive computing means "existing everywhere". It is the growing trend towards embedding microprocessors in everyday objects so they can communicate information. Due to this, all the embedded and mobile computing devices are becoming more and more pervasive and dynamically adaptive. In this paper we have described how a pervasive computing model helps to achieve dynamic adaptation with the environment and ubiquitously handles the overall environment. This paper sketches a hypothetical pervasive computing scenario, and uses them to identify key capabilities missing from today's systems. And so we have demonstrated a pervasive model which can handle various traffic issues such as deadlock prevention and various random cases like car to car collision, sending signals to the vehicles approaching towards the point of collision and to prevent further deadlock problems. In this paper, we have shown previous problems in the era of computing and its solution achieved by this computing technology. The first section of this paper gives introduction to pervasive computing then second section describes the approach overview of this computing technology, third section deals with its layered architecture and fourth concentrates on case study analysis with explanation of hypothetical scenarios fifth, sixth and seventh deals with the proposed work and finally the last section gives the conclusion and references.
References

- Shang-Wen Cheng, David Garlan, Bradley Schmerl, João Pedro Sousa, Bridget Spitznagel, Peter Steenkiste, Ningning Hu School of Computer Science Carnegie Mellon University 5000 Forbes Ave. Pittsburgh PA 15213 USA
- 2006 Bundesamt für Sicherheit in der Informationstechnik –BSI Godesberger Allee 185-189, 53175 Bonn, Germany and SecuMedia Verlags-GmbH . Page73 Postfach 1234 55205 Ingelheim, Germany Tel. 06725/93040 Fax. 06725/5994 E-Mail: info@secumedia.de
- Technology and Society Magazine, Volume 24, Issue 1, pp. 24 - 33, 2005
- Michael H. Coen, &quot;Design Principles for Intelligent Environments&quot;,
Proceedings of the fifteenth national/tenth conference on Artificial intelligence/Innovative applications of artificial intelligence, Madison, Wisconsin, United States; pp. 547 - 554, 1998
- Guy Dewsbury, &quot;The Social and Psychological Aspects of Smart Home Technology within the Care Sector&quot;,
- Paul Dourish and Genevieve Bell, &quot;Yesterday's tomorrows: notes on ubiquitous computing's dominant vision&quot;,
- Personal and Ubiquitous Computing, Volume 11 , Issue 2, pp. 133 - 143, 2007
- Yitao Duan and John F. Canny, &quot;Protecting user data in ubiquitous computing: Towards trustworthy environments&quot;,
- Privacy Enhancing Technologies, Volume 3424, pp. 167 - 185, 2005
- Anne Galloway,&quot;Intimations of everyday life: Ubiquitous computing and the city&quot;,
- Cultural Studie, Volume 18, Issue 2 & 3, pp. 384 - 408, 2004
Pervasive Computing and Its Application to Traffic Collision and Congestion Control


Index Terms

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Keywords

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