**LITURATURE SURVEY:**

**"Risk Aversion and Expected-Utility Theory: A Calibration Theorem",**

Within the expected-utility framework, the only explanation for risk aversion is that the utility function for wealth is concave: A person has lower marginal utility for additional wealth when she is wealthy than when she is poor. This paper provides a theorem showing that expected-utility theory is an utterly implausible explanation for appreciable risk aversion over modest stakes: Within expected-utility theory, for any concave utility function, even very little risk aversion over modest stakes implies an absurd degree of risk aversion over large stakes. Illustrative calibrations are provided.

**“A Perspective on Recent Developments in Utility Theory”**

The Allais Paradox seems as fresh today as it was when first posed some 40 years ago. It has been discussed in the intervening decades and led to many suggestions for modifying, extending or abandoning standard subjective expected utility theory. It has also led to much discussion of the distinction between normative and descriptive models and their role in prescriptive decision support. It seems appropriate in a conference entitled Decision Making: towards the 21st Century to reflect on these developments, particularly in relation to recent extensions to utility theory and other mathematical models of preferences, and consider, in particular, their possible implication for prescriptive decision analysis.

**Policy based Agents in Wireless Body Sensor Mesh Networks for Patient Health Monitoring:**

There is presently considerable research interest in using wireless and mobile technologies in patient health monitoring particularly in hospitals and nursing homes. For health monitoring, an intelligent agent based hierarchical architecture has already been published by one of the authors of this paper. Also, the technique of monitoring and notifying the health of patients using an intelligent agent, to the concerned hospital personnel, has also been proposed. We now present the details of the functioning of four main intelligent agents, viz., the nurse agent, the sensor agent, the database agent and the ward boy agent, for intimating the health information to the concerned doctor in the hospital, based on certain policies relevant to the hospital. The policies, in our case have been worked out based on the temperature parameter monitored by the ¿nurse agent¿. We have considered just as an example, the physiological parameter viz., the body temperature monitoring, for our policy based agent implementation. The implementation has been carried out using JADE-LEAP agent development kit. The details are presented in the paper.

**“Intelligent Agent based Hotel Search and Booking System”**

M-commerce (mobile commerce) is the buying and selling of goods and services through wireless handheld devices such as cellular telephone and personal digital assistants PDA. M-commerce provides lot of services like Mobile ticketing, Mobile banking, Mobile location based services, Mobile auctions, Mobile purchasing and so on. This represents an incredible opportunity to enable mobile devices, as a universal device for mobile commerce applications. For such applications, we normally want to choose the best hotel in prime locations, with modern facilities, clean environment and affordable rates. This can be time consuming and sometimes costly when doing this on our own or using human agents. So based on this we here propose "Intelligent Agent Based Hotel Search and Booking System". This system here would use an intelligent agent (instead of the human agent) to perform similar search and booking activities that can improve the speed of the search and reduce cost significantly. So in summary we propose developing a an agent that will move from hotel to hotel from the mobile devices like Smart phones by collecting details on the list of available facilities, price, customer experience, transportation etc and forward-feeding them back to the user's mobile phone. The implementation will be carried using JADE-LEAP agent development kit.

**“Developing Multi agent Systems with JADE,”**

Agent-Oriented Programming (AOP) is a relatively new software paradigm that brings concepts from the theories of artificial intelligence into the mainstream realm of distributed systems. AOP essentially models an application as a collection of components called agents that are characterized by, among other things, autonomy, proactivity and an ability to communicate. Being autonomous they can independently carry out complex, and often long-term, tasks. Being proactive they can take the initiative to perform a given task even without an explicit stimulus from a user. Being communicative they can interact with other entities to assist with achieving their own and others’ goals. The architectural model of an agent-oriented application is intrinsically peer to peer, as any agent is able to initiate communication with any other agent or be the subject of an incoming communication at any time.