A Protocol defines how communication takes place between computer systems. Protocol designing is a complex task due to the growing size of networks and changing technology. Informal and Formal methodology are used to design a protocol. Informal methods use natural language or textual format to design specifications. Formal methodology uses formal language to define specifications. Informal methodology have some shortcomings like blurred or ambiguous specifications, analysis of protocol is complex and not suitable for designing large protocols. Formal methodology uses automated tools to design specifications and is very useful for debugging of specifications. Specification designing is a key step in protocol design and development in both...
methods. Specification based on user requirement hence it is human sensitive. Fuzzy logic is best to understand natural language. It is multi-output and multi-input solution finding logic. It supports all designing phases of a protocol. Hence we proposed to use of fuzzy logic for specification design in formal protocol design methodology

References

- J. L. da Silva Jr., MSgroi, F. De Bernardinis, S. F. Li, "Wireless protocols Design and Opportunities";
- Marten van Sinderen, Luis Ferreira Pires, Chris A. Vissrrs, "Protocol Design and Implementation Using Formal Methods"; This work has been partly supported the CEC research programmeESPRIT II(Lotosphere, ref. :2304).
Fuzzy Approach for Formal Protocol Design Methodology

Index Terms

Computer Science  
Digital Signal Processing

Keywords

Formal design  protocol  specification  validation