

### **325. MULTITUPLE PACKET CLASSIFICATION USING DYNAMIC DISCRETE BIT SELECTION ALGORITHM**

N.Aarathi <sup>1</sup>, Dr.R.Avudaiammal<sup>2</sup>, Dr.A.Swarnalatha<sup>3</sup>

<sup>1</sup>M.E Applied Electronics, <sup>2</sup>Professor, <sup>3</sup>Associate Professor

St.Joseph's College of Engineering, Chennai

mnarathi@gmail.com,avudai\_r@yahoo.com,swarnalatha7@gmail.com

Internet traffic classification plays an important role in network management. Many approaches like have been used to classify different categories of Internet traffic but these approaches have specific usage contexts that restrict their ability in the current network environment. For example, the port based approach, the deep packet inspection and the statistical based approach. The main challenge of today's network is the demand for fast classification on large rule sets. Hence a novel multistage classifier namely dynamic discrete bit selection algorithm is proposed and is implemented in IXP2400 network processor. Experimental results on rule sets promise that D2BS is a practical solution that achieves to satisfy rigorous requirements and higher classification of network.

Keywords- IXP2400, Network Processor, packet classification, prefix expansion, longest prefix matching

*Journal of Science and Innovative Engineering & Technology*