

# Review Paper on Socket Programming

Poorvika B M<sup>1</sup>, Prajwal Gowda M M<sup>2</sup>, Prasad R<sup>3</sup>, Rahul R Poojary<sup>4</sup>, Mr. Pradeep Nayak<sup>5</sup>

Assistant Professor, Department of Information Science and Engineering<sup>5</sup>

Students, Department of Information Science and Engineering<sup>1,2,3,4</sup>

Alva's Institute of Engineering and Technology, Mijar, Mangalore, Karnataka, India

**Abstract:** *The paper's objective is to introduce sockets and discuss how they are used in network programming. For client-server applications to function, sockets are essential. By sending to or reading from these sockets, the client and server can exchange data. They were created in Berkeley as a component of the BSD UNIX operating system and the Internet helped them spread like wildfire. In this paper, network programming fundamentals and socket-based network application development are covered. Because java has been used largely for establishing client-server interactions through sockets, performing the socket functions/methods is one of the most fundamental network programming tasks that a java programmer is likely to encounter. The paper's objective is to introduce sockets and discuss how they are used in network programming. For client-server applications to function, sockets are essential. These sockets allow the client and server to exchange data by writing to or reading from them. They were created in Berkeley as a component of the UNIX operating system known as BSD. Transfers that are synchronous and asynchronous. In today's globalised society, when data transmission is essential for communication within any company, it is crucial to use the network strategically to ensure efficient transmission with little traffic overhead. The two such strategies discussed in this study can be chosen to suit the requirements of every company. Socket programming and remote method invocation are the two methods.*

**Keywords:** 5G mobile communication network

## REFERENCES

- [1]. In IPv6 IEEE 2015 International Conference on Computing Communication Control and Automaton, Bobade S. and Goudar R. (2015) present Secure Data Communication Using Protocol Steganography.
- [2]. Improved Smart Power Socket for Monitoring and Controlling Electrical Home Appliances, Hassan E A, Shareef H, Islam M M, Wahyudie E, and AbdrabouAA 2018, IEEE Access 6, p. 49292-49305.
- [3]. Emblogic India Pvt. Ltd Noida.
- [4]. [http://en.wikipedia.org/wiki/Berkeley\\_sockets](http://en.wikipedia.org/wiki/Berkeley_sockets)
- [5]. [http://www.tutorialspoint.com/java/java\\_networking.htm](http://www.tutorialspoint.com/java/java_networking.htm)
- [6]. Gellings, P. Smart Grid Planning and Implementation; River Publishers: 9260 Gistrup, Denmark, 2020.
- [7]. Utilizing Digital "Micro-Mirror" Devices for Ambient Light Communication by Xu, Tapia, and Ziga. Pages. 387–400 in Proceedings of the 19th USENIX Symposium on Networked Systems Design and Implementation (NSDI 22), Renton, Washington, USA, 4-6 April 2022.
- [8]. Professionals in WiFi, 2022. The 4 Way Handshake is accessible online at <https://www.wifi-professionals.com/2019/01/> (Retrieved on October 1, 2022)
- [9]. Liquid Crystal Technologies. 2022. Available online: <http://www.liquidcrystaltechnologies.com/products/lcdshutters.htm> (accessed on 1 November 2022)
- [10]. <http://docs.oracle.com/cd/E19683-01/816-5042/6mb7bck68/index.html>
- [11]. <http://findaccountingsoftware.com/directory/rmi-corporation/rmi-advantage>
- [12]. <http://www.cs.rutgers.edu/~pxk/rutgers/notes/sockets/index>
- [13]. <http://www.oracle.com/:ORACLE>
- [14]. Lashkari, A.H.; Danesh, M.M.S.; Samadi, B. A survey on wireless security protocols (WEP, WPA and WPA2/802.11 i). In Proceedings of the 2009 2nd IEEE International Conference on Computer Science and Information Technology, Beijing, China, 11 August 2009; IEEE: Piscataway, NJ, USA, 2009; pp. 48–52

- [15]. Mishra, A.; Arbaugh, W.A. An Initial Security Analysis of the IEEE 802.1 X Standard; Technical Report CS-TR-4328. University of Maryland, College Park; 2002