

# **SAMPLE ABSTRACT**

## **A COMPARATIVE STUDY ON USING WINDOWS AND UNIX OPERATING SYSTEMS IN A SCIENTIFIC ENVIRONMENT**

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It is expected that UNIX-based systems will perform more efficiently in a number of real life situations than Windows. In contrast, it is expected that Windows will be preferred by users. The user preference, performance and effectiveness of Windows and UNIX-based Operating Systems are studied in this research. The lack of computer-oriented undergraduate students versed on UNIX-based systems is an increasing source of concern. Some companies even push to have Windows-only system networks. Should performance be replaced for user-friendliness in the scientific world? To test this, we take the computer-performance and user factors into account. Real life situations are used to gather results for computer performance. A survey among Electrical/Computer Engineering and Computer Science students is used to gather the user data. However, this is difficult due to a lack of courses available during summer. Matrix calculations in computers with different specifications are used to test performance. The performance data gathered from MATLAB processes was disorganized and there are no fixed proportions. The data indicates that 42.1% of the users surveyed have the knowledge to operate UNIX. Everyone knew how to work Windows though, which is no surprise. There are two things I consider to be the most significant. First, the number of people who knew UNIX was higher than expected, but with the UMET's results, the number dropped, no one has learned UNIX through college classes in the UMET, some even suggested there should be an UNIX course. Secondly, even though they lacked UNIX knowledge, 52.6% said that they would like to work with UNIX if they knew how to operate it, those that preferred Windows said it was because of its user-friendliness. In summation, Windows is preferred mostly because users lack knowledge of UNIX and data gathering did not allow for anything concrete in computer performance, as the statistical evidence suggests.