

**APPLICATION OF THE PATTERN MATCHING METHOD TO OVERCOME  
REDUDANCE IN SUBMITTING PROPOSALS FOR STUDENT ACTIVITIES IN THE  
STUDENT INFORMATION SYSTEM**

*(Case Study: Yogyakarta Technology University Student Affairs)*

**Dimas Krisna Wiradharma, Umar Zaky, S.Kom., M.Cs**

*Information Systems Study Program, Faculty of Science & Technology  
University of Technology Yogyakarta*

*Jl. Ring Road Utara Jombor Sleman Yogyakarta*

*E-mail : [dimaskrisna26@gmail.com](mailto:dimaskrisna26@gmail.com), [umarzaky@uty.ac.id](mailto:umarzaky@uty.ac.id)*

**ABSTRACT**

*This research focuses on developing a system to overcome various problems in managing student organization proposals and funds at University of Technology Yogyakarta. The main questions raised include the system's ability to organize process stages consistently, provide up-to-date information on the status of applications for permits and funds by ormawa, as well as how the integration of a Decision Support System (DSS) can overcome subjectivity and variation in proposal assessment. The development method used includes combining TOGAF ADM and SDLC, with data from student organizations at Yogyakarta University of Technology as a basis. The research results show that the proposed system has great potential in improving the consistency of process steps. The integration of SPK with the Aho-Corasick algorithm succeeded in reducing subjectivity and variation in proposal assessment, as well as speeding up the approval process and reducing redundancy in submission data. Although there is still room for improvement, this system is expected to increase the efficiency and effectiveness of managing student organizations as well as the quality of activities carried out.*

**Keywords:** *TOGAF, Pattern Matching, Similarity Check, Aho-Corasick Student Affairs, Student Organizations*