

SISTEM REKOMENDASI PERAN KARIR MAHASISWA REKAYASA PERANGKAT LUNAK DENGAN METODE SIMPLE MULTI ATTRIBUTE RATING TECHNIQUE EXPLOITING RANK (SMARTER)

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ABSTRAK

Mahasiswa Program Studi Rekayasa Perangkat Lunak (RPL) sering mengalami kesulitan dalam menentukan peran karir yang sesuai dengan minat dan kemampuan yang dimiliki. Permasalahan ini disebabkan oleh keterbatasan informasi serta belum tersedianya sistem pendukung keputusan yang mampu memberikan rekomendasi secara objektif dan terukur. Penelitian ini bertujuan untuk merancang dan membangun sistem rekomendasi peran karir bagi mahasiswa RPL menggunakan metode *Simple Multi Attribute Rating Technique Exploiting Rank* (SMARTER) dengan pembobotan *Rank Order Centroid* (ROC). Sistem rekomendasi dikembangkan berdasarkan empat kriteria utama dengan total 33 subkriteria, enam alternatif peran karir, serta melibatkan 30 responden mahasiswa. Pengujian sistem dilakukan menggunakan metode *black box testing* dan pengujian hasil metode SMARTER berdasarkan preferensi mahasiswa. Hasil penelitian menunjukkan bahwa sistem yang dibangun mampu memberikan rekomendasi peran karir yang sesuai dengan minat mahasiswa dengan tingkat akurasi sebesar 83%. Sistem ini diharapkan dapat membantu mahasiswa RPL dalam menentukan peran karir secara objektif, sistematis, dan terarah.

Kata kunci: Sistem Rekomendasi, Peran Karir, Mahasiswa RPL, SMARTER, Sistem Pendukung Keputusan.

**SOFTWARE ENGINEERING STUDENT CAREER ROLE
RECOMMENDATION SYSTEM USING SIMPLE MULTI-
ATTRIBUTE RATING TECHNIQUE EXPLOITING RANK
(SMARTER) METHOD**

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ABSTRACT

Students of the Software Engineering study program often experience difficulties in determining career roles that align with their interests and abilities. This issue is caused by limited information and the absence of an objective and measurable decision support system for career selection. Therefore, this study aims to design and develop a career role recommendation system for Software Engineering students using the Simple Multi Attribute Rating Technique Exploiting Rank (SMARTER) method with Rank Order Centroid (ROC) weighting. The system is developed based on four main criteria with a total of 33 sub-criteria, six career role alternatives, and involves 30 student respondents. System testing is conducted using black box testing and evaluation of SMARTER method results based on student preferences. The results indicate that the developed system is able to provide career role recommendations that match students' interests with an accuracy level of 83%. This system is expected to assist Software Engineering students in determining career roles in a more objective, systematic, and well-directed manner.

Keywords: Recommendation System, Career Roles, Software Engineering Students, SMARTER, Decision Support System