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**1. 페이지 분량**

**2. 참고문헌 개수 및 본문인용**

**3. 연구결과에 대한 표나 그림 유무**

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* 논문 분량: **참고문헌 포함 6page 이상**
* 참고문헌은 **최소 10개 이상** 인용하시고, 본문에서 인용된 순서대로 번호를 작성해주시기 바랍니다. 인용되는 위치에는 ‘[ ]’로 표기 해주세요
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Background/Objectives: In 30 words.

Methods/Statistical analysis: It should be 70 words

Findings: It should be 170 words.

Improvements/Applications: In 30 words.

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## Abstract (\* 요약 내에 참고문헌 인용 금지. Background, Method, Findings, Improvements 4개의 항목을 중심으로 작성 바랍니다. )

**Background/Objectives**: In <30 words. Please use a 11-point Calibri (Body) font or its closely related font family throughout the article unless otherwise mentioned; the right margins should be justified wherever possible.

**Methods/Statistical analysis**: It should be <70 words. Include the method adapted to study the objectives/sampling details or simulation or statistical analysis of data; technique employed; mention unique/ important points of modification of methodology in the current study. Mention about test samples the control employed or approach used for comparing the test sample.

**Findings**: It should be <170 words. Mention your findings in the form of statements along with the conclusive data of statistical importance; Mention how your findings are unique and novel; how your findings are in consensus with the existing values/ reports or how different are they from the already reported findings. Highlight how your results are helpful in adding more value to the existing reports.

**Improvements/Applications**: In <30 words. It makes it possible to write about the results of the improved research and other applications.

***Keywords*:** 5-6 words, 11-point Calibri (Body) font, Normal, Drawn from title, Word representing the work.

**1. Introduction**(\*Introduction 부분은 소제목(문헌리뷰 및 관련연구 등)을 분리하여 작성하지 마세요)

Data mining helps to extract the original and the valuable data from the large amount of dataset. Data mining can be implemented in different areas such as Fraud detection, Medical, Education, Banking, Marketing and Telecommunications. Feature selection is Feature selection is a process to pick a group of features as subset that are identically suitable for investigation and for future predication by removing the unrelated or redundant features. The ultimate objective of feature selection process is to increase the predictive accuracy and reducing complexity of learner results[1]. In the universities or in academic institutions, it’s very difficult to predict the frailer or dropout students in early stage. Data assimilations is the main process used to reduce student dropout percentage and to increase the student enrolment percentages in the university. Dropout in residential university is caused by academic, family and personal reasons, campus environment and infrastructure of university and varies depending on the educational structure agreed by the university. Thus, this work aims to effectively formulate education program and institutional infrastructure through which the student’s enrollment rate at the university will get increased significantly. The main aim of this paper is to develop a improved decision tree model and to derive a classification rules to predict whether student will graduate or not using the historic dataset. In this paper, improved decision tree model is used to generate the model. Information like age, parent’s qualification, parent’s occupation, academic record, attitude towards university was collected from the students to forecast the group of students needs the periodical monitoring[2,3].

**2. Materials and Methods**

It includes sampling, sample preparation, preparation of control sample, measurement detail including Instrument and suppliers/ chemicals and suppliers, experimental set up, map/details of sampling site or study area, source of sample, where ever necessary ethical clearance obtained must be stated[4].

**2.1. *Sub-title***

Methods adapted (pl include reference), any modification of regular methods, the extraction methodology/ simulation models, the growth conditions and measurement of plants/ animals should be stated. Wherever necessary provide (citation) references1.

***2.1.1. Sub-sub title***

Standard methods and techniques need not be written fully rather it can be cited2.

Mention only required modifications, if made[1,5].

**2.2. *Sub-title***

Mention the statistical details, the number of samples used, statistical tools/software used/ SD/level of significance, repeatability etc.

**3. Results and Discussion**

Table must be in Table format. Enter the data in the Table and present it as such and do not convert it as picture type; always use page set up in portrait and not the Landscape. Where the breadth of the Table exceeds the page width, use Arial Narrow 9 point font. All the Tables must be numbered [Table 1, Table 2….]. All Table must bear Title and be placed above the Table[6-8].

Figure must be of high resolution with printable quality. Usually placed as jpeg or gif type or directly drawn and placed in text box. All figures must bear title and numbered [Figure 1, Figure 2….]. Put all your Tables and figures at the end of the article in separate pages. Mark their positions [Table 1], [Figure 1].



#### Figure 1. Design of Improved Decision tree algorithm for Educational Data mining

(그림 제목은 그림 아래에 표기해주십시오. 그림내에 한글표기 금지)

**Step 1**: The Renyientropy are used for characterizing the amount of information in a probability distribution. It’s generalization of Shannon entropy. Calculate Renyientropy using the formula

$A=πr^{2}$ (1)

(!! 수식은 수식편집기를 이용하여 작성해주세요.)

Here X is a discrete random variable with possible outcomes 1, 2…n. α is the order and when it equals to 1 it is Shannon entropy. A completely homogeneous sample has the entropy of 0.Equally divided sample has the entropy of 1.

**Step 2:** Calculate the Information gain IG of each attribute using the formula:

$\sin(α)\pm \sin(β)=2\sin(\frac{1}{2}\left(α\pm β\right))\cos(\frac{1}{2}\left(α\mp β\right))$ (2)

It is found that only 12 features are most relevant to the task of student dropout prediction out of original number of 31 features collected through questionnaire as seen in Table 1. Then the ID3 and improved decision tree algorithm is employed on selected subset of features and record using 10 fold cross validation. Attribute with highest information gain is used as a root node. The dropout dataset is classified into two groups Yes and No based on the confusion matrix for Improved Decision Tree was constructed shows accuracy percent 92.50 for ID3 and 97.50 for improved Decision Tree. It indicates that improved decision tree is the best classifier for predicting the student who will dropout or not at the university[5,9,10].

(표 제목은 표 위에 표기해주십시오. 표 내에 한글표기 금지)

#### Table 1: Initial Set of features used for the experimentation

|  |  |
| --- | --- |
| 1. Residence
2. Family Type
3. Family Annual Income
4. Father’s Education
5. Mother’s Education
6. Father’s occupation
7. Mother’s occupation
8. College Location of student
9. Student grade/percentagein High School (10th )
10. Studentgrade/percentage in Senior Secondary (10th )
11. Course Admitted
12. Admission type
13. Satisfaction with Course
14. Syllabus of Course
15. Parents meet the university expenses
16. Family experiences Stress
 | 1. Like this University
2. Educational system of University
3. Infrastructure of university
4. Extra-curriculum activities in university
5. Entertainment in university
6. Time for self study
7. Placement Status
8. Participate in extra curriculum activity
9. Teacher Student relationship
10. Family Problem
11. Home Sickness
12. Campus Environment
13. Change of Goal
14. Adjustment Problem
15. Enrolled in other universities
 |

**4. Conclusion ( !! 결론 내에 참고문헌 인용 금지)**

This paper proposed an improved decision tree algorithm for prediction of dropout student. The objective of this work is to develop an improved decision algorithm that enhances the ability to form decision trees and thereby to prove that the classification accuracy of improved decision algorithm on educational dataset is greater. A new decision tree model is to be constructed by using Renyi entropy for calculating the information gain and the association function will be used which determines the relative degree between thegiven attribute and class C. Experimental results will prove that improved decision tree algorithm will provide better prediction accuracy on student dropout data than that of traditional classification algorithms.

**5. Acknowledgment**

* (연구비 지원과 관련된 내용 작성- 없을 시 삭제 후 References를 장번호를 5.로 변경)

**6. References**

1. Petitti DB, Crooks VC, Buckwalter JG, Chiu V. Blood pressure levels before dementia. Arch Neurol. 2005 Jan;62(1):112-6. (저널논문)
2. Jun BC, Song SW, Park CS, Lee DH, Cho KJ, Cho JH. The analysis of maxillary sinus aeration according to aging process: volume assessment by 3-dimensional reconstruction by high-resolutional CT scanning. Otolaryngol Head Neck Surg. 2005 Mar;132(3):429-34. (저널논문)
3. Hallal AH, Amortegui JD, Jeroukhimov IM, Casillas J, Schulman CI, Manning RJ, et al. Magnetic resonance cholangiopancreatography accurately detects common bile duct stones in resolving gallstone pancreatitis. J Am Coll Surg. 2005 Jun;200(6):869-75. (6인 이상 저널논문)
4. Stockhausen L, Turale S. An explorative study of Australian nursing scholars and contemporary scholarship. J Nurs Scholarsh [Internet]. 2011 Mar [cited 2013 Feb 19];43(1):89-96. Available from: http://search.proquest.com.ezproxy.lib.monash.edu.au/docview/858241255?accountid=12528 (e-저널논문)
5. Bhutta ZA, Darmstadt GL, Hasan BS, Haws RA. Community-based interventions for improving perinatal and neonatal health outcomes in developing countries: a review of the evidence. Pediatrics. 2005 Feb;115(2 Suppl):519-617. DOI:10.1542/peds.2004-1441. (DOI 있는 저널)
6. Jenkins PF. Making sense of the chest x-ray: a hands-on guide. New York: Oxford University Press; 2005. p. 16. (Book)
7. Modlin IM, Sachs G. Acid related diseases: biology and treatment. 2nd ed.Philadelphia: Lippincott Williams & Wilkins; c2004. p. 38. (Book)
8. Jones DL. The role of physical activity on the need for revision total knee arthroplasty in individuals with osteoarthritis of the knee [dissertation]. [Pittsburgh (PA)]: University of Pittsburgh; 2001. 436 p. (학위논문)
9. Weisbaum LD. Human sexuality of children and adolescents: a comprehensive training guide for social work           professionals [master's thesis]. Long Beach (CA): California State University, Long Beach; 2005. 101 p. (학위논문)
10. Jones DL. The role of physical activity on the need for revision total knee arthroplasty in individuals with osteoarthritis of  the knee [dissertation]. [Pittsburgh (PA)]: University of Pittsburgh; 2001.  (학위논문)
11. Centres for Disease Control and Prevention. Shingles on face. [Image on internet]. 2011 [updated 2011 Jan 10; cited 2012 Nov 6]. Available from: http://www.cdc.gov/shingles/about/photos.html (website)
12. Diabetes Australia. Diabetes globally [Internet]. Canberra ACT: Diabetes Australia; 2012 [updated 2012 June 15; cited 2012 Nov 5]. Available from: http://www.diabetesaustralia.com.au/en/ Understanding-Diabetes/Diabetes-Globally/ (website)

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