CS5346

Project 1:

Expert Profession Recommender System

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Table of Contents:

1. Introduction 2
   1. Problem Statement
   2. Solution
2. Contributors 3
3. Analysis of the Problem 4
   1. Domain and Goal
   2. Problems with existing code
   3. Proposed Solution
4. Knowledge Base Design 5
   1. Decision Tree
   2. Rules Formation
5. Inference Engine Design 6
   1. Backward Chaining Tree
   2. Rules For Backward Chaining
   3. Forward Chaining Tree
   4. Rules For Forward Chaining
6. Methodology 7
   1. Algorithm
   2. Data Structures
7. Program Implementation 8
8. Sample Run 9
   1. Sample 1
   2. Sample 2
   3. Sample 3
9. Analysis of Program Results 10
10. Comparison of Systems 11

**Introduction**

**1.1 Problem Statement**

According to the National Center for Education Statistics, the current cost of attending a 4-year institution of higher education is currently more than $26,000 annually in the United States. With these high costs being placed of students it is imperative that we give students the tools to complete their educations as efficiently as possible and to realize the greatest result from their education after they’ve graduated.

Giving students expert guidance as early as possible in their educations will help them realize the greatest benefit from the cost of their education. But our nation collectively also invests a great amount in the education of our students on top of their contribution of tuition. We rely on students being properly placed in positions were they can excel. Properly pairing well educated students with high-demand jobs assures the greatest return to the community for the expense of educating a young adult.

The earlier a student can be given the expert guidance the better. Early guidance will allow a student to shape their education most effectively. But human guidance is often an expensive commodity. With college attendance rates steadily rising, undergraduate counselors find themselves advising larger groups of students without additional resources. It is therefore greatly advantageous to students, institutions, and society that an automated career recommender be developed.

**1.2 Solution**

Modern students have nearly continuous exposure to computer and network resources. By placing an automated recommender system at their disposal, students will be given access to to early and regular career guidance.

Any automated that is applied in this problem domain will need to be able to recommend a large variety of professions to a student based on his or her interests. Furthermore it would be beneficial if this system could recommend not only a profession but a specific area within a profession.

The focus of this project will be the implementation of a system which fits these criteria.

**Contributors:**

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