

Introduction

The final project is intended to be a limited investigation in an area of machine learning of your choice. The purpose of the project is to enable you to study an area of your interest in greater detail in a practical way. The project can take on many forms, including but not limited to,

- 1) Projects that explore the application of machine learning ideas to an interesting “real-world” problem.
- 2) Projects that involve a theoretical or empirical study of aspects of a learning method or model.
- 3) Projects that do an experimental, comparative study of various machine learning methods.

Requirements

You can work on the project in groups of at most three people. You must submit a project proposal by the beginning of class on April 6th, 2004. The project proposal is intended to get you thinking on what you will be doing and when. It should contain a short description of the questions that you will address, what are the basic steps towards answering the questions, and a timeline of when you expect things to be done. The proposal should clearly show that you have thought carefully about your project and should contain a list of resources that will help you achieve the goals (e.g. books, datasets, references to related works). The project proposal is worth 20% of the grade.

You will have to do a short presentation of your work in the last week of classes. The presentation will be worth 20% of the grade. The final project report will be due on (midnight) May 14th, 2004, and should document your work and results. The report will be worth 60% of the grade.

Evaluation

The projects will be graded in the same spirit as research papers are assessed (though we don’t expect you to do original work at the same level.) Here is a list of things that we will be looking for:

- 1) Originality
- 2) Relevance to course
- 3) Quality of arguments (are claims supported, how convincing are the arguments you bring forward)
- 4) Connection to earlier work
- 5) Clarity (how clearly are goals and achievements presented)
- 6) Scope/Size (in proportion to size of group)
- 7) Significance (are the questions you are asking interesting)

Conclusion

Feel free to come and talk to us about the various aspects of your project (in fact we strongly encourage you to) so that we can make sure that you are on the right track. Don’t forget to have fun while doing it; its meant to be something that you are interested in doing!