

ECSE 484 Computational Intelligence

Problem Set 10: Project Proposal

This assignment is intended to get you a start on your final project and to provide some early feedback.

You should submit a project proposal that explains to us what you intend to attempt. Your project should explore an area of neural networks relevant to the material in this course (which may include extensions not covered in lectures). Presumably, your project will use TensorFlow. (This is not a requirement, but if you will not be using TensorFlow, you should explain why).

It is our hope that by performing this project, you will gain familiarity and confidence in applying neural networks, which will hopefully carry over as a skill you can use in the future.

In your project proposal, you should include some preliminary results/assessments to provide indication that your proposed project is achievable within the time limits and your access to training data.

We will evaluate these proposals on the basis of:

- feasibility
 - is the proposed application viable? (i.e. is there reason to believe it should work)
 - will there be sufficient training data?
 - is the project scope suitable? (not over or under ambitious)
- creativity
 - is the application interesting/novel?

Doing a parametric study of network architectures and hyperparameters on a known problem is acceptable (but a little boring).

It is our intent to offer you timely feedback to help assure that your project is likely to be successful.

A project that yields a negative result is acceptable, since that, too, is useful information. However, a negative result requires more documentation and interpretation to make sure the negative result is not merely a result of poor implementation.

A project may be done collaboratively, but we would expect proportionally greater level of effort.