

Engineering Track: Final Project Proposal

B351 / Q351

Basic Information

Project Title: Monitoring the Housing Market Through a Neural Network

1. Name: Elizabeth 'Lizzy' Gabel

Short Project Statement

In this project we will train a neural network to analyze features of a given property and determine its market value. We will determine the best parameters for the problem space, proper feature selection, and system for successful property cost prediction.

2. Name: Alexander Mervar

3. Name: Aidan Rosberg

1 Problem Space

1. Describe the problem space. What are the objectives, challenges, and constraints? What are some of the variations found in the problem space? The problem space is the housing market.
2. What are some historical attempts to tackle the problem space? Include links and references where appropriate.

2 Algorithms

1. What solution are you proposing? How will this compare to historical approaches?
2. What algorithms will you implement? Include links and references where appropriate.

3 Third-Party Libraries and Technologies

If you intend to use third-party tools or technologies, please explain the following for each technology:

1. What technology will you be using?
2. What will it be used for / how will it assist you in your project?
3. How will you demonstrate your knowledge of the topic area despite off-loading work to the third-party technology?

List this for **all** non-standard libraries you will use. For example, the first item for many Python developers might be numpy, and the first item for many Javascript developers might be jquery. You may always opt to use more third-party tools later by presenting the proposal modification request form to your mentors at one of your check-ins.

4 Project Goals

In this section, please list the specific action items that you intend to complete by the end of the project. Include a range of reach (A-range), target (B-range), and safe (C-range) goals. Each set of goals should build on the previous set. This section will serve as a rubric used to assign a majority of your overall project grade, so be as specific as possible. You may use a bulleted format. This section should be no longer than 1 page single-spaced.

4.1 C-range Goals

Fallback goals for the project should go here.

4.2 B-range Goals

Your target goals for the project should go here. These must go beyond the specific algorithms covered in class.

4.3 A-range Goals

Ambitious goals for the project should go here.

Timeline

Please delineate the major milestones of your project (no milestone should take more than a week to accomplish). The milestones should have accompanying descriptions of everything they entail.

Then, for each milestone, specify when you will have it completed (specific date). Additionally, make it clear which milestones you will have completed by each check-in date.

Acknowledgement

Instructor Mentor 1 _____ Signature _____

Instructor Mentor 2 _____ Signature _____

Team Member 1 _____ Signature _____

Team Member 2 _____ Signature _____

Team Member 3 _____ Signature _____