



# Your first neural network

## Project Submission

DUE  
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## Your First Neural Network

### Introduction

In this project, you'll get to build a neural network from scratch to carry out a prediction problem on a real dataset! By building a neural network from the ground up, you'll have a much better understanding of gradient descent, backpropagation, and other concepts that are important to know before we move to higher level tools such as Tensorflow. You'll also get to see how to apply these networks to solve real prediction problems!

The data comes from the [UCI Machine Learning Database](#).

### Instructions



## Your first neural network

the GitHub repo are the most up to date, so it's the best place to get the project files.

2. cd into the `first-neural-network` directory.
3. Download anaconda or miniconda based on the instructions in the [Anaconda lesson](#).
4. Create a new conda environment:

```
conda create --name dlnd python=3
```

5. Enter your new environment:

- Mac/Linux: `>> source activate dlnd`
- Windows: `>> activate dlnd`

6. Ensure you have `numpy`, `matplotlib`, `pandas`, and `jupyter notebook` installed by doing the following:

```
conda install numpy matplotlib pandas jupyter notebook
```

7. Run the following to open up the notebook server:

```
jupyter notebook
```

8. In your browser, open `Your_first_neural_network.ipynb`
9. Follow the instructions in the notebook; they will lead you through the project. You'll ultimately be editing the `my_answers.py` python file, whose components are imported into the notebook at various places.
10. Ensure you've passed the unit tests in the notebook and have taken a look at [the rubric](#) before you submit the project!

If you need help running the notebook file, check out the [Jupyter notebook lesson](#).

## Submission

Before submitting your solution to a reviewer, you are required to submit your project to Udacity's Project Assistant, which will provide some initial feedback. It will give you feedback within a minute or two on whether your project will meet all specifications. It is possible to



The setup for the project assistant is simple. If you have not installed the client tool from a different Nanodegree program already, then you may do so with the command `pip install udacity-pa`.

To submit your code to the project assistant, run `udacity submit` from within the top-level directory of the project. You will be prompted for a username and password. If you login using google or facebook, visit [this link](#) for alternate login instructions.

This process will create a zipfile in your top-level directory named `first_neural_network-result-number.zip`, where there will be a number between `result-` and `.zip`. This is the file that you should submit to the Udacity reviews system.

Upload that file into the system and hit Submit Project below!

## What to do afterwards

If you're waiting for new content or to get the review back, here's a [great video from Frank Chen](#) about the history of deep learning. It's a 45 minute video, sort of a short documentary, starting in the 1950s and bringing us to the current boom in deep learning and artificial intelligence.

# AI and Deep Learning

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