

# Final Project Checkpoints

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Fall 2014 - Bioinformatics (CPSC 68)

## 1 November 10, 2014 - Lab 10

**Goals** For Lab 10, we plan to have all of our initial data collected. We will parse the data to get it in the format we need, and analyze the data for any insights necessary for our implementation.

**Progress** Database: <http://autosnpdb.appliedbioinformatics.com.au/index.jsp?species=wheat>

Acquire and implement BootRank. Research flaws, weaknesses, and key features. Adapt algorithms to our data and look for prediction overlap between already existing work.

**Difficulties** Unable to acquire SNP data. Had to re-form our initial proposal, relocate relevant databases, and restructure goal and implementation methods.

## 2 November 17, 2014 - Lab 11

**Goals** Achieve a better understanding of Neural Networks and how we can apply them to our ultimate goal, predicting breast cancer recurrence. Begin implementation of our own neural network.

**Progress** We have located and run through a few online tutorials. We have begun looking at implementations.

**Difficulties** Technical details concerning neural networks, e.g. evaluation methods and optimizations.

### **3 November 24, 2014 - Lab 12**

**Goals** Finish researching other works. Finish developing and debugging our algorithm. Begin comparison of results with pre-existing prediction methods.

**Progress** Finished implementing neural network, still needs a bit of cleaning-up. Did rough research and comparison of other works.

**Difficulties** Narrowing the variables to use in our data is posing a challenge. Data is provided as R-code, so navigating R and formatting our data is taking longer than expected.

### **4 December 1, 2014 - Lab 13**

**Goals** Begin paper: methodology, validation, related work. Analyze experiments.

**Progress**

**Difficulties**

### **5 December 8, 2014 - No Lab**

**Goals** Finish paper. Think of extensions. Compare results to what we can expect from other algorithms, and any discrepancies in results. Evaluate results on a higher, biological level.

**Progress**

**Difficulties**

### **6 Exam Week**

**Goals** Finalize Paper and Presentation. Practice our 10 minute talk.

**Progress**

## Difficulties