hey, I am Jenny! I am very excited to take this interview today. Currently I am taking a master degree of Computer Science, and I got a bachelor degree of Electrical Engineering. During my undergrad, I have taken several courses in Computer science, the field such as data structure and algorithm, and database system. Then I found that I was more interested in Computer Science than Electrical Engineering. And that’s why, after graduation, I seek for jobs which belongs to Computer science area.

**First job, I work in Virgina Tech Research Center**.

My responsibility is to test kDDN, which is a Java app for constructing dependency networks with significant rewiring

and also help my colleagues to do integration test of BACOM2 R package, a Java tool for detecting normal cell contamination of cope number in heterogeneous tumor.

**My second job worked in Ames IT and Numeric Solutions**

* Optimize Selenium and use it for web test automation

Selenium Webdriver is a powerful automation tool for testing web applications. It’s an open source library bundled with a rich set of features. Using it for testing a website is just like simulating the actions of a real user.

* Troubleshoot and debug minor program bugs by modifying existing programs with enhancements.

**Full time, Senparc**

* Assist customers by addressing software installation and operation questions
* Build business web pages according to customer’s requirements
* Participate in data analysis group

Favor project

House price prediction

Preprocessiong

Step 1: Merge two dataset into one. (crime rate dataset and house price data set).(In order to combine two dataset, we first transfer longitude and latitude in california housing price dataset into specific address. Then extract city information from each house’s address to match the crime rates data.)

Step 2: Data preprocessing. Scale, Normalize and center numeric values. PCA, reduce size of matrix without losing information. Feature selection. We apply feature selection method to decide features importance.

Step 3: Split data set into two part. Split train and test that were combined to handle preprocessing. Further split train so we have a validation set to score against.

Algorithm

1. Linear Regression
2. Lasso Regression
3. Ridge Regression
4. Gradient Boosting
5. Random Forest

Validation

The standard error

Highest accuracy

Gradient Boosting (90%)

**Question**

### What’s your favorite part about working at the facebook company?

How could you keep your work-life balance?

What is focus area of your group?

I also have experience on Front end.

When can I know the result of feedback of this interview.

**Oriented object Design**

* **Encapsulation**
  + A tight coupling or association of data structures with the methods or functions that act on the data. This is called a class, or object (an object is often the implementation of a class).
* **Data Protection**
  + The ability to protect some components of the object from external entities. This is realized by language keywords to enable a variable to be declared as private or protected to the owning class.
* **Inheritance**
  + The ability for a class to extend or override functionality of another class. The so called child class has a whole section that is the parent class and then it has it's own set of functions and data.
* **Interface**
  + A definition of functions or methods, and their signatures that are available for use to manipulate a given instance of an object.
* **Polymorphism**
  + The ability to define different functions or classes as having the same name but taking different data types.

The main patterns in MVC are:

Observation:

Composite:

Strategy:

Other Patterns:

Factory Method: to specify the default controller class

Decorator: to add behavior to a view

Command: to handle menu requests and support undo

Chain of responsibility: to process action events in nested views

Adapter: to adapt incompatible interface for component reuse

.