

## Programmer internship questionnaire

### [1] Basic Information

1. First name: **Yi**

Last name : **Xue**

Address : **36 Huntington Rd. #2R**

**New Haven, CT 06512**

2. Email : [yxuecs@gmail.com](mailto:yxuecs@gmail.com)

Ph : **203-500-6378**

3. Highest level of formal education : **Ph.D.**

4. Education :

University	Area	Degree
<b>University of New Haven (US)</b>	<b>Computer Science</b>	<b>M.S.</b>
<b>Northwestern University (US)</b>	<b>Biochemistry and Life science</b>	<b>Ph.D.</b>
<b>University of Sci and Tec of China (CN)</b>	<b>Chemistry</b>	<b>M.S.</b>
<b>Xiamen University (CN)</b>	<b>Chemistry</b>	<b>B.S.</b>

5. GPA :

**University of New Haven     4.0**

6. Skills required :

- Complete familiarity with Windows and /or Mac :

**Use window OS in daily life and do coding on it. Very proficient.**

**Do not use Mac often, however, took the iOS development course, and developed a mobile project in Xcode. Have some level of familiarity.**

- SQL :

**Very skilled with SQL. Developed a web-based database project with MySql and Java.**

- Excel and VBA :

**Used excel to process experimental data before, wrote some simple VBA script to automate the data processing. Overall, it is easy for me though I did not do extensive work on them.**

- OO programming :

**Very familiar with Java, as it is my major coding language. Used it for various course assignments, such as cryptography algorithms and web back-end development.**

**Have experiences with C++, used it in data structures courses.**

7. Skills desired :

- programming with .NET or .COM

**No experiences**

- previous experience with trading platforms by Interactive Brokers, TD Ameritrade...

**No experiences**

- experience with APIs

**Developed some small programs to communicate with APIs, such as google map and amazon product API. Also developed some test RESTful APIs with JavaEE for learning purpose.**

- internet and Network infrastructure

**Have a good understanding of internet and Network infrastructure from the course “computer networks and data communication”.**

- understanding of some of the more popular cloud technologies

**Limited knowledge from internet.**

- Matlab, R

**No experiences, but very motivated to learn them as they are exceptional in numerical computation.**

- UNIX and open-source projects

**Linux is another OS I used in daily life. I use ubuntu 14.0.4, and many other open source projects, including python3, Netbeans, Eclipse, and Nodejs , etc.**

- Web development html, php, css ...

**Familiar with html, css and javascript, wrote some simple php scripts for learning purpose. Knowledge of JQuery , nodejs and expressjs.**

## 8. More about myself

During my graduate studies ( one and a half now ) my major focus is to establish the high level understanding of the relationships among different areas in computer science. Such that, I chose Java to learn the OO paradigms and gain insights in design patterns. I chose web development to integrate the language, database, cryptography and network communication knowledge. Knowledges are very dynamic , but rules are more stable. With the guidances of the rules, knowledge can be acquired much more efficiently. Now, with the knowledge and experiences mostly obtained from school, I wish to get the real opportunities to testify and practice them.

### [2] Logic

1. **(c)**
2. **(d)**
3. You have to check the smallest set [ lily, fox]
4. **(e)**
5. **(f)**

### [3] Risk

#### 1. No.

E is the long-run average, which means you have to play many rounds to get close to the value. Even E is positive, if the variance is too large, you may lose a lot in one round. Thus, a rational player will consider more to decide to play or not.

#### 2. Yes.

Standard deviation is a good indication of how the outcome could spread out. Smaller value is correlated with less risk.

#### 3. If E is very high and SD is low, I may play.

### [3] Risk

#### 1.

Symbol	Q	P	Total Value
AAAA	600	\$2.30	\$ 1380
BBBB	900	\$12.20	\$ 10980

#### 2. See attached excel sheet (with pdf version).