
Tech Job Application & Interviews

CS356 Object-Oriented Design and Programming

<http://cs356.yusun.io>

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CAL POLY POMONA

How to Choose Your Career?



The Types of Software Development

- ◆ **Web service development (Back-end)**
- ◆ **Mobile development**
- ◆ **Web front-end development**
- ◆ **UI/UX design**
- ◆ **Data engineer**
- ◆ Software testing / QA
- ◆ Domain-Specific application development
- ◆ Desktop/System application development
- ◆ Embedded software development
- ◆ Database administrators
- ◆ System administrators



The Types of Software Companies

- ◆ Big Hightech
- ◆ Startups
- ◆ Traditional Top 500
- ◆ Small Companies



The Types of Jobs

- ◆ Full-Time
- ◆ Internship
- ◆ Part-Time
- ◆ Startup



The Salary



Suggestions

- ◆ Interests & Passion are the most important
 - ◆ Do the job you like
 - ◆ The team is sometimes more important than the company
- ◆ No idea?
 - ◆ Just do it
 - ◆ Then you know what you want
 - ◆ You will not regret about what you have done

How to Apply?



Referral

- ◆ It's not what you know, it's WHO you know



Career Fair

- ◆ Good opportunities
- ◆ Do your homework!



Apply Online

- ◆ Apply as many as possible
- ◆ Don't worry too much about the requirements - Just try
- ◆ Chance is small, but there are chances



LinkedIn

- ◆ Be technical
- ◆ Make yourself searchable



About Resume

- ◆ Be short: 1-2 Pages
- ◆ Things to highlight: technical, technical, and technical!
 - ◆ Technical experiences/project
 - ◆ Technical skills
 - ◆ Years of experiences, e.g., Java (4 years), Python (3 years)
 - ◆ Be like a CS major (no MS Office, Windows, etc.)
 - ◆ Related awards
 - ◆ Project links / websites
- ◆ No empty words
 - ◆ “Great leadership”, “Teamwork spirit”, “goal-driven”, etc.

When to Apply?

- ◆ About 6 months ahead
- ◆ Summer Internship: end of the year or early next year

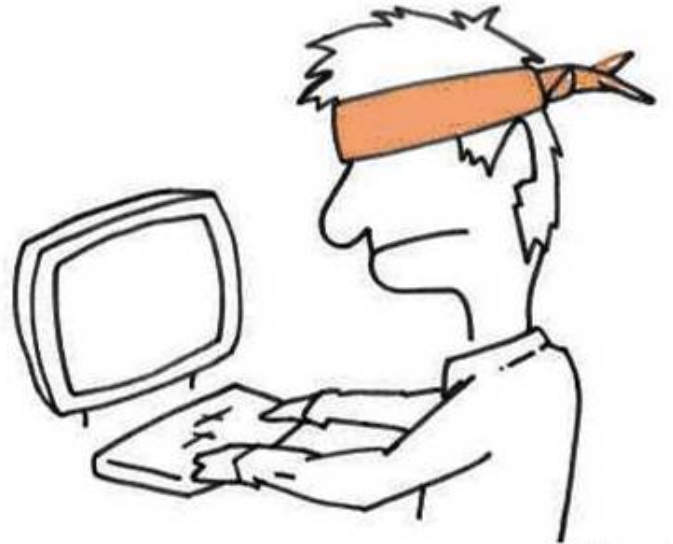


What's the Format of Interviews?



Phone Interviews

- ◆ About 1-3 phone interviews
 - ◆ Each 40 mins
 - ◆ 2-3 questions (80% coding)
- ◆ Phone interview = Computer Coding
 - ◆ <http://collabedit.com/>
 - ◆ Google Doc
- ◆ Topics
 - ◆ Data structure and Algorithms
 - ◆ OO concepts
 - ◆ OO design
 - ◆ System design
 - ◆ Math/Probability
 - ◆ Brain teasers



Onsite Interview

- ◆ 1-day on-site interview
 - ◆ Meet around 5 engineers and 1 manager
 - ◆ Each 45 mins
 - ◆ 1-2 questions (90% coding)
- ◆ Onsite Interview = White board coding
- ◆ Extremely tired
 - ◆ Take exercises
 - ◆ Coffee



How to Prepare?



Work Hard

- ◆ Don't expect any shortcut
- ◆ At least 2 months algorithms practice
- ◆ Every single day



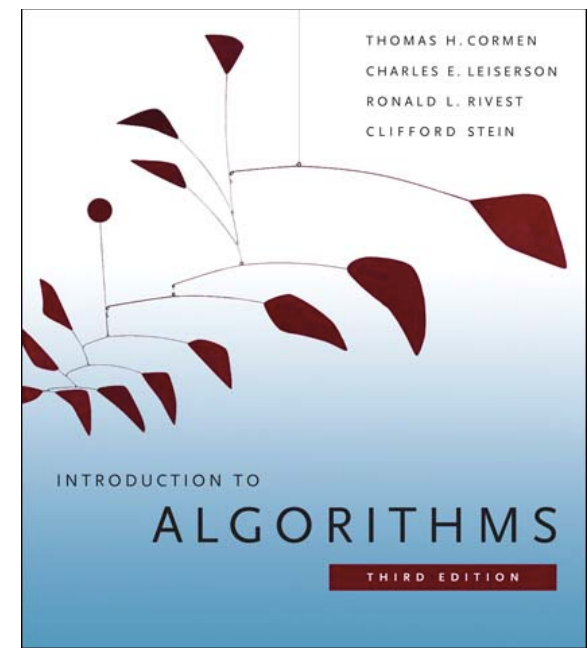
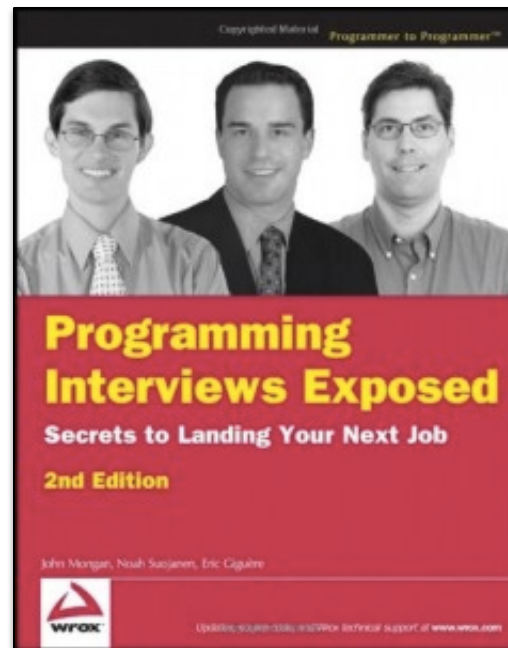
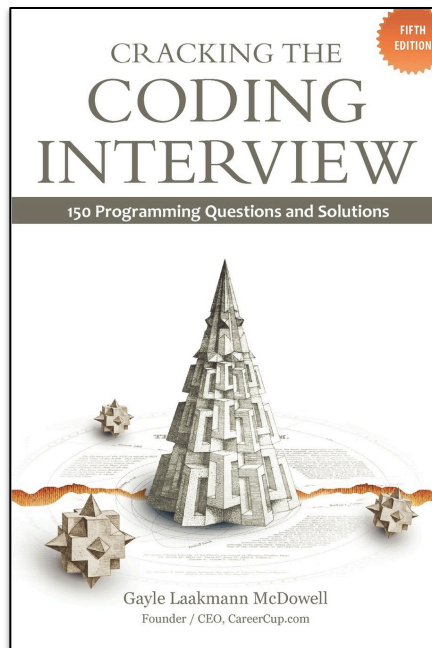
Female Developers

- ◆ Interview bars are a little bit lower



Recommended Resources

- ◆ <http://leetcode.com/>
- ◆ <http://www.careercup.com/>

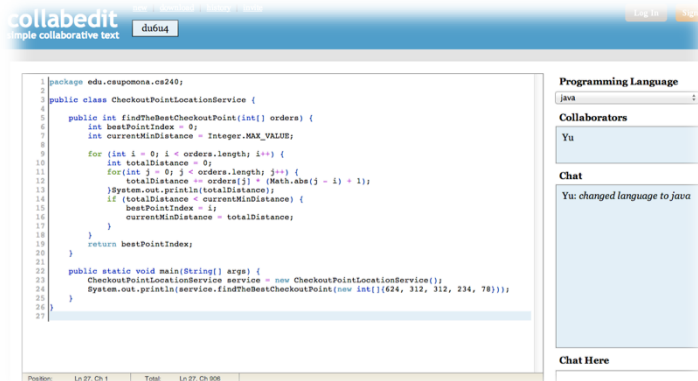


The Recommended Way

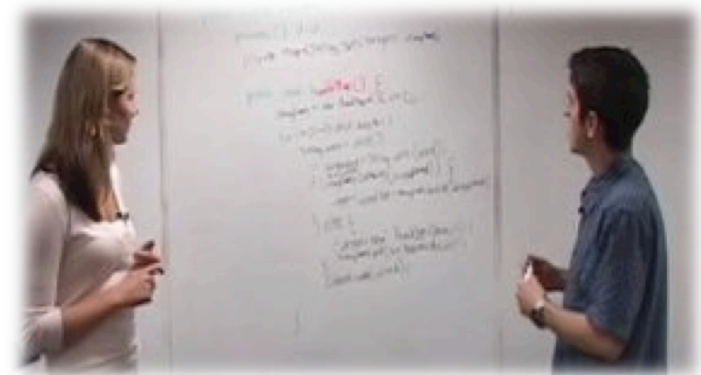
- ◆ Practice with real questions
- ◆ Learn and summary the things you don't know
- ◆ Repetition!

Tips

- Practice coding in a non-IDE environment
 - <http://collabedit.com/>
 - Google Doc
- Practice coding with a white board
 - Pay attention to time complexity
 - Practice explaining your code while writing it
 - Practice asked questions
 - <http://www.careercup.com/>
 - Team practice and stress practice



```
1 package eds.cs.pomona.cs240;
2
3 public class CheckoutPointLocationService {
4     public int findTheBestCheckoutPoint(int[] orders) {
5         int bestPointIndex = 0;
6         int currentMinDistance = Integer.MAX_VALUE;
7
8         for (int i = 0; i < orders.length; i++) {
9             int totalDistance = 0;
10            for (int j = 0; j < orders.length; j++) {
11                totalDistance += orders[j] * (Math.abs(j - i) + 1);
12            }
13            System.out.println(totalDistance);
14            if (totalDistance < currentMinDistance) {
15                bestPointIndex = i;
16                currentMinDistance = totalDistance;
17            }
18        }
19        return bestPointIndex;
20    }
21
22    public static void main(String[] args) {
23        CheckoutPointLocationService service = new CheckoutPointLocationService();
24        System.out.println(service.findTheBestCheckoutPoint(new int[]{624, 312, 312, 234, 78}));
25    }
26 }
27
```



Prepare Questions to Ask

- ◆ Make yourself professional and technical
- ◆ Ask
 - ◆ Projects
 - ◆ Techniques and tools
 - ◆ Software development approaches
 - ◆ Be specific and relevant
- ◆ Don't ask
 - ◆ Weather
 - ◆ Work schedule
 - ◆ Holidays



Behavior Questions

- ◆ Prepare the basic
- ◆ Know your own resume very well!



Start Preparing from Today

