



Students' Placement Office

Internship Guide



Students' Placement Team

IIT Kanpur

2009-2010



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COMPANIES THAT TOOK INTERNSHIP FOR 2009-2010

S.No.	Company Name
1	Adobe
2	Airport Authority of India
3	Amazon
4	APACSS
5	Aspiring Minds
6	Clickable
7	Continental Construction
8	DB
9	DE Shaw
10	Delloite
11	DrReddy
12	Fairchild Semiconductors
13	Galaxy Surfactants
14	GE
15	Hero Honda
16	HPCL Jaipur
17	HUL
18	IBloomTech
19	IBM IRL Extreme Blue
20	IMMT
21	Indrion
22	Infosys
23	Ingersoll Rand
24	VMWare
25	Zeus Numerix

S.No.	Company Name
26	Interra Systems
27	ITC
28	Kritikal Solution
29	LGSI
30	Mahindra and Mahindra
31	MakeMyTrip
32	Mechatronics
33	Microsoft
34	MSR
35	Oracle
36	Philipps Research India
37	Pokarna
38	Priza
39	Qualcomm
40	Radianx Robotics
41	RIL
42	Schlumberger
43	Shree Cement
44	SRF
45	Strand LS
46	Tata Steel
47	TCS CTO
48	Vakil Mehta Sheth

There were few companies that conducted their internship process but could not find any students suitable for the internship. Here is a list of such companies:

S. No.	Company Name
1	Forbes Marshall
2	Google
3	IBM ISL
4	Morgan Staneley
5	NetApp
6	Worldquant

RESUME BASED SELECTION

Following is the list of the companies that selected students based on the resume itself:

S.No.	Company Name
1	Airport Authority of India
2	Continental Construction
3	Hero Honda
4	HPCL Jaipur
5	IMMT
6	LGSi
7	Mechatronics
8	RIL
9	TCS CTO
10	Vakil Mehta Sheth
11	Zeus Numerix

AMAZON

Round 1: Resume Based Short Listing

- **Selection Criteria:** CPI (not explicitly mentioned though about the cut off or criteria)

Round 2 : Technical Interviews

- Questions from Data Structures, Algorithms and Databases.
- Coding questions : one in each interview

General instructions:

- Read Cormen for algorithms
- Google for Amazon interview questions
- Resume preparation must be started in the beginning of third year
- Know everything on your resume
- Knowledge of projects and 2nd year internship is must eg. project explanation, knowledge of its flaws and some more functionality which can be added in it
- Use the last year job interview Database for preparation

If you are having telephonic interview and you get a coding question, code it on IDE and not on pen and paper

APAC SOURCING SYSTEMS

Round 1:

- **Type:** Resume based short listing
- **Selection criteria:** Chemistry and Chemical Engineering Knowledge

Round 2:

- **Type:** Personal Interview
- **Format:** HR and Technical interview

General instructions for interview :

- Be well prepared on the questions from 2nd year projects and internship during the interview
- Interview was based on resume so just highlight your strong points and stress and try to divert the interview towards them
- It's a start up company so it offers a good opportunity to understand the market and the strategies involved in analysis and implementation



DE SHAW

Round 1:

- **Type:** Resume based short listing
- **Selection criteria:** CPI Cut off : 7.0

Round 2:

- **Type:** Telephonic interview
- **Selection criteria:** Only technical interview
- **Format:** Based on projects and departmental courses especially related to Data Structure , Algorithms linked lists and string algorithms

General instructions:

- Describe your projects clearly during the interview



DR REDDY

Round 1:

- **Type:** Resume based short listing
- **Selection criteria:** Relevant project in manufacturing
- **CPI Cut off : 7.5**

Round 2:

- **Type:** Personal Interview
- **Selection criteria:** Grades and previous projects
- **Sample questions**
 - Tell me about yourself
 - Why do you want to join this company
 - Questions related to MOS , TA201
 - Description of 2nd year project details like the formulae used

GOOGLE

Round 1:

- **Type:** Resume based short listing
- **Selection criteria:** Resume ; CPI > 8

Round 2:

- **Type:** Online Coding Test
- **Format:** Long coding problems in which we are supposed to move step by step and they consider the approach not the end result only

Round 3:

- **Type:** Three Technical Interviews
- **Format:** Testing Software skills
- **Important Courses :** Discrete Mathematics and Graph theory
- **Important Topics :** Linked Lists and Balanced tree
- **Other Questions:** Projects done and their description with the problems faced and approach to solve it effectively

HINDUSTAN UNILEVER LIMITED (HUL)

Round 1:

- **Type:** Form Filling
- **Format:** Some general life questions along with the resume based questions.
- **Special Tips:** Fill the form carefully as the interview is based on the answers. One must be able to defend each and every point of the form.

Round 2:

- **Type:** Group Discussion (Case Study)
- **Format:** 2 groups of 10 students
- **Duration:** 5 minutes for the reading and 25 minutes for the discussion.
- **Sample:** 2-3 pages of a case study regarding the problems faced by the company due to a particular section of the workers demanding cut down in work hours and more incentives because of greater risk involved. Discuss the possible solution.

Round 3:

- **Type:** Interview
- **Format:** Purely Technical
- **Duration:** around 45 minutes
- **Sample Questions:**
 - In thermodynamics, complete details of the cycles is necessary, knowledge of internal combustion engine will help
 - In fluid mechanics, focus was given to the pumps, compressors, various types of losses etc
 - Questions based on the project
 - Questions pertaining to the courses of the ongoing semester like heat and mass transfer



IBM IRL

Round 1:

- **Type:** Resume based short listing
- **Selection criteria: CPI Cut off : 8**
- **Format:** Resume submission.

Round 2:

- **Type:** Telephonic Interview
- **Format :** Project specific interview ,Machine Learning in this case
- **No. of Students selected :** 1

General instructions:

1. Duda Hart is a good book for Machine Learning
2. At least one programming language must be known
3. Basics are important for this interview

ITC

Round 1:

- **Type:** Form Filling
- **Format:** Some general life questions along with the resume based questions.
- **Special Tips:** Fill the form carefully as the interview is based on the answers. One must be able to defend each and every point of the form.

Round 2:

- **Type:** Group Discussion (Case Study)
- **Format:** 6 groups of 8 students
- **Duration:** 5-7 minutes for the reading and 20-25 minutes for the discussion.
- **Sample:**
 - Discuss the pros and cons of various power plants to be set up in a well specified city, taking into account all the factors mentioned in the case study itself
 - Discuss the various reasons that led to the death of a person and who needs to be blamed for it

Round 3:

- **Type:** Interview
- **Format:** Technical and HR
- **Duration:** around 1 hr
- **Sample Questions:**
 - Mostly technical questions pertaining to the department ,
 - Topics included thermodynamics , fluid dynamics, power and their application in real life
 - Questions based on your project even if it is a TA project
 - A few introductory HR questions like tell about yourself, family background , plans after graduation and reasons for joining ITC

KRITIKAL SOLUTIONS

Round 1:

- **Type:** Resume Submission
- **Selection criteria:** Though Technical know-how , CPI Cut off : 7.5
- **No. of Students selected:** 11 students were shortlisted for the next level

Round 2:

- **Type:** Telephonic interview
- **Format:** Mostly technical
- **No. of Students selected:** 2 students were selected

General instructions:

- Be well prepared with technical questions related to computing and logic
- Coding was stressed on during the interview
- For electrical engineering students ,EE 370 should be revised

MICROSOFT IDC

Round 1:

- **Type:** Written Test
- **Selection criteria:** CPI was main criteria, Manufacturing was not so important
- **CPI Cut off :**7.0- 7.5
- **Format:** 5 questions on following topics:
 1. C code- debugging
 2. Ideal test suit for a code
 3. product design(questions like designing a music players for joggers- parameters to consider)

Round 2:

- **Type:** Personal Interview , 4 rounds
- **Selection criteria:** Technical interview.
- **Sample Questions :** Graphs ,Algorithms

General instructions for interview:

- Be well prepared on the questions from 2nd year projects and internship.
- Proficiency in a programming language is required
- Questions on: operating systems, fragmentation- in detail, internal/external, paging

MICROSOFT RESEARCH

Round 1:

- **Type:** Resume based short listing
- **Selection criteria:** **Though it was not mentioned, but for all selected candidates CPI > 9**
- **Format:** Resume submission and mentioning the areas of interest (from a list of Research Groups)
- **No. of Students selected:** 11 students were shortlisted for the next level

Round 2:

- **Type:** Telephonic interview
- **Format:** Each of the shortlisted students received calls from 2-3 different groups which interviewed the student. The telephonic interviews were mainly discussion of the projects done by the student in the past and a few questions. Then the groups described the project for the internship and the student had to tell if he/she was interested to do an internship in that group.
- **No. of Students selected:** Based on these telephonic interviews 7 students were selected finally for the internships (5 at Redmond, 1 at Silicon Valley and 1 at Bangalore)

General instructions:

- Resume Making workshops should be attended for proper preparation.
- Though the interview this time centred more around the projects one has done, till last year the selection process for some of the groups also involved questions on algorithms and also coding. This year probably due to time constraints as the process had begun late, this was not there.
- Knowledge of basic algorithms is required for qualifying the interviews of the internships and in addition to this, a good description of work done by you in your projects also counts a lot. Also it would be helpful if the students (of Y8 and the succeeding batches) do a project or an intern during the second year summers. It is also advised to apply only for the areas in which you are interested in while applying for the internships.

SHLUMBERGER

Out of a total of around 100 applicants, 32 were selected for the group discussion on the basis of the resume. The criteria included good sports profile, or active extracurricular activities, or good CPI and they also looked for AIR of JEE

Round 1:

- **Type:** Group Discussion (Case Study)
- **Format:** 4 groups of 8 students each
- **Duration:** 35 minutes
- **Sample:** You are left on a deserted place and had to rate 20 things in an order depending on their importance for survival of the group
- **Special Tips:**
 - Give practical example
 - Do not be too aggressive, do not try to interrupt when someone else speaks
 - Your individual opinion should not clash strongly with that of the group
 - Reach a conclusion at the end

Round 2:

- **Type:** Interview
- **Format:** Technical and HR
- **Duration:** around 20 minutes
- **Sample Questions:**
 - Technical questions pertaining to the department and the project/internship
 - What is your favourite subjects and questions from it
 - Tell something about yourself not mentioned in the resume
 - Will you be able to handle physical work? If yes, support your answer
 - Extracurricular and sports activities you have done and in what capacity
 - Any improvements or innovation brought as a team leader or member
 - What changes would you like to bring in the current ATM machine? Think and answer
 - How would you design an alarm clock for a deaf person?
 - Where do you see yourself 5 years down the line?
 - Do you have any problems with working outside India or at a remote location?
 - Why Schlumberger and how you came to know about the company
 - Role of your department
 - Suggestions, comments on what you didn't like about the company or the PPT?
- **Special Tips:**
 - You must be able to speak at least 20-30 minutes on your resume
 - Show your interest in core jobs with field jobs
 - Do not worry if your CPI is low, but you need to justify it



SHREE CEMENT

Round 1: Resume based short listing

Round 2: Technical Interview

Sample questions:

- Questions were asked on Heat & mass transfer, Fluid Mechanics
- Questions like courses done, working of a cement plant
- Value of a fanning factor
- Density of air

TATA STEEL

Round 1: Form Filling

- The company had sent a form that was on the lines of a resume. This form had to be filled out by applicants and sent to the company. After around 10 days, 50-60 people were initially shortlisted on form basis.
- Short listing Criteria: your answers in the form the company provided. Overall balanced profile is preferred. Not much stress on CPI. Generally people with 7 and above CPI were selected.

Round 2: Written Test

- **Format:** The test was divided into two parts: Aptitude Test and Technical Test with equal no of questions in each. The technical test was different for each department.
 - Aptitude test was primarily a speed check. Simple logical questions, the kind one prepares for NTSE were asked.
 - Technical test of MME was tough. Questions were based on metallurgy and steel industry. Relevant courses: MME320-Extractive Metallurgy. TA 201. Questions were factual, checked your memory. Not very calculative. Focus on metallurgy and not the materials part.

Round 3: Interview

- **Format:** Interview was taken in groups of 4 (time: 25-40 minutes)
- **Sample Questions:**
 - "Tell me about yourself." followed by form-based questions
 - Why this company
 - Your strengths and weaknesses
 - Any questions you would like to ask us
 - Technical: Not many questions asked. Some basic fundamental questions

General Suggestions:

- Talk about your strong points in the interview
- While mentioning your weaknesses, do not say points like short-tempered which can be taken very negatively
- Talk to people working in that company beforehand
- Read about Steel from the website or departmental sources
- Stay informed right from the beginning of third year about the internship process