



# Internship Preparation Booklet

A guide to resources for  
internship preparation!



# DISCLAIMER

The primary purpose of this booklet is to educate and inform the reader. Information in this booklet is meant to supplement, not replace, any IAFs or details posted on the Internship/Placement Blog.

All the information is provided on an “as-is” basis with no guarantee of completeness, usefulness, or timeliness of any kind whatsoever, expressed or implied. It is the reader’s responsibility to verify their own facts. **Any action you take upon this information is strictly at your own risk.** We highly recommend you to prepare according to the process this year and not based on the previous years' trend/generalization.

The views and opinions expressed in the booklet are those of the individuals involved. The resources have been collated for various domains by using the information provided by individual contributors to the best of their knowledge. They do not necessarily reflect the official policy or position of Career Cell or any other organization, employer and/or company.

All the resources present in this booklet are taken from the public domain.

# PREFACE

**Dear Students,**

We, at Career Cell, aim to help undergraduate students find and pursue a career that is best suited to their abilities and liking. With this booklet, we intend to ease the preparation for internships, which can be confusing to navigate for some students. Here, we provide you with information and resources regarding the preparation, especially collated for, but not limited to, third-year internships.

One of the best sources of this information, as we concluded, would be our seniors who have gone through the process and have successfully acquired internships in different domains such as, but not limited to, Finance, Consulting, Analytics, IT/Software, etc. Thus, we have personally contacted them and sought answers to a comprehensive list of questions while also including their personal views, resources they used for preparation, and resumes that helped them secure their internships.

**We have also provided preparation resources. Most of the resources have been hyperlinked. Thus, you can click on any of these and be directed to the respective web pages.**

We hope this booklet provides you with useful resources and relevant insights. Feel free to contact us for any other assistance you may need.

All the best!

Regards,  
**Aarushi Chaudhary**  
**Institute Secretary Academic Affairs**  
**Head, Career Cell (2021-22)**

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# ACKNOWLEDGEMENTS

**To all who contributed,** the completion of this booklet would not have been possible without the participation and help of so many people, all of whose names may not be enumerated.

Your contributions are sincerely appreciated and acknowledged. Thank you so much for giving insights and resources that led to the creation of this booklet!

**To the people who reviewed this booklet,** we are grateful to you for taking out the time to do so. Your suggestions and advice helped us refine our ideas and approach throughout the process. This book is richer through your contributions!

**To UG Academic Council members,** we would like to express our gratitude for your constant guidance and support throughout.

**To you,** all the readers of this booklet, for their constant support and motivation. Any suggestions for further improvement of this booklet are more than welcome!

We apologize if we have missed anyone.

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# RESOURCES#

Note: Additional resources related to specific domains have been provided in the relevant section of the booklet

# Please click on the resources you want to access, they are hyperlinked to respective folders. Resume resources are available to access through **LDAP enabled G-Suite account.**



Resume Repository



Resume Making Resources



Preparation Material



UG Academics Blog\*

\*Please use VPN to access the website

# **FINANCE**

Note: These resources have been collated using responses by many senior students and should be used as per one's discretion only.

[Click to access resumes](#)

[Click to access preparation material](#)

## **WEBSITES:**

- For case prep and basic quant prep:  
[www.academia.edu/37964894/DayOne v1](http://www.academia.edu/37964894/DayOne_v1)
- For aptitude and quant preparation:  
[www.pariksha.co](http://www.pariksha.co)
- For aptitude preparation:  
[www.faceprep.in](http://www.faceprep.in)  
[www.hitbullseye.com](http://www.hitbullseye.com)
- For puzzles:  
[www.gurmeet.net/puzzles/](http://www.gurmeet.net/puzzles/)
- [www.rankyourbrain.com](http://www.rankyourbrain.com)
- [www.tradermaths.com/tradermath/](http://www.tradermaths.com/tradermath/)

## **BOOKS:**

- The Intelligent Investor
- The Little Book of Common Sense Investing
- The Psychology of Money
- Mastering Fundamental Analysis
- Understanding Michael Porter
- The Four Pillars of Investing
- Case Interviews Cracked
- Heard on the Street (aptitude questions/above average difficulty tests)
- Author: Sheldon Natenberg (Topic: Options Pricing and Understanding)
- Author: J.C Hull (Topic: Finance)
- CFA Level 1 Book (Topic: Finance)

## OTHER RESOURCES:

- <https://youtu.be/G-DwtMkeNTo>
- [www.investopedia.com](http://www.investopedia.com) is a great resource to read up on any financial instruments and concepts related to the job profile
- Probability and Statistics by Sheldon M. Ross is a good resource for learning probability concepts (No need to read the entire book for finance interviews, just chapter 3 & 4 should be enough)  
[Click to access resources](#) (Courtesy: Analytics Club)
- [https://gymkhana.iitb.ac.in/~ugacademics/new\\_research/index.php/category/career-cell/finance/](http://gymkhana.iitb.ac.in/~ugacademics/new_research/index.php/category/career-cell/finance/)  
(Link to blog series, please use VPN)

## GENERAL TIPS:

"I did some intermediate level courses on Coursera for certification and profile building."

*Kalpesh Rathi, Morgan Stanley*

"Being aware of macroeconomic and industry-wide trends would help. Understand the company's business model and the job profile in-depth."

*Niranjan Herwadkar, Deutsche Bank*

"Emphasize the point that coding is important for non-core sectors. Almost every firm in finance and analytics seeks coding. In Finance, except for Goldman Sachs, almost every other firm requires only basic coding and not competitive coding. Learn about basic finance too because FinMechanics, Barclays, etc. also ask basic finance in the shortlisting test."

*Chaitanya Kedia, Barclays*

"The '50 Challenging Problems in Probability' book comes in handy for not only tests but certain finance company interviews too. "Technical Analysis for Dummies" is good for any beginner who has very little idea about technical analysis.

The 'Investment Valuation' book by Aswath Damodaran is large but is the bible of value investing. For anyone who's interested in understanding value investing using traditional methods (discounted cash flows), his lecture series on Youtube is also very good. It's time-consuming and if one cannot invest that much time, 'The Little Book' can be referred to.

Value investing comes in handy for equity research (not so much for trading) but it is really good for providing a strong foundation and comes in use more often than not just during interviews.

I learned Python very late, so if anyone has zero knowledge about Python, the 'Python for Data Analysis' book is the best book to learn. For machine learning enthusiasts, there's another book for ML in Python. I would recommend people going for finance profiles to master coding. People with excellent coding skills (data wrangling, data cleaning, ML) have good chances of getting into companies with algorithmic trading."

*Varun Ginde, Axxela Advisory LLP*

# ANALYTICS

Note: These resources have been collated using responses by many senior students and should be used as per one's discretion only

[Click to access preparation material](#)

[Click to access internship preparation resources](#)

(Courtesy: Varun Jha, HyperVerge BA)

[Click to access resumes](#)

## WEBSITES:

- For company-specific questions and DSA preparation:  
[www.geeksforgeeks.org/](http://www.geeksforgeeks.org/) (topic wise coding questions)
- For puzzles:  
[www.gurmeet.net/puzzles/](http://www.gurmeet.net/puzzles/)
- For coding practice:  
[www.hackerrank.com/interview/interview-preparation-kit](http://www.hackerrank.com/interview/interview-preparation-kit)
- [www.coursera.org/specializations/deep-learning](http://www.coursera.org/specializations/deep-learning)
- [www.keras.io/examples/](http://www.keras.io/examples/)
- [https://gymkhana.iitb.ac.in/~ugacademics/new\\_research/index.php/category/career-cell/analytics/](https://gymkhana.iitb.ac.in/~ugacademics/new_research/index.php/category/career-cell/analytics/)  
(Link to blog series, please use VPN)

## BOOKS and RESOURCES:

- The puzzle part in a book called DAY 1.0 has questions which help to understand the concepts and it is really useful

## OTHER RESOURCES:

- The youtube playlist of Aditya Verma is very useful for someone who is studying DSA for the first time
- For the probability section, the curriculum covered in departments is enough

For AI/ML-based internships:

- Complete Andrew Ng's courses on ML and DL which are great for basic ideas
- Be very thorough with your project (code and objective wise)
- Go through all the basic definitions of ML concepts: NN, different types of layers, etc.
- Go through the basics of competitive programming, especially dynamic programming

## GENERAL TIPS:

"If you are a beginner in coding ie. know all syntaxes and want to solve problems, start with hackerrank over any other platform, because the UX is very easy to understand and is the only platform which can show you all test cases. Having used a lot of platforms myself, hacckerrank has particularly given me a lot more confidence to solve problems plus solutions are easily available on the net.

From telegram, you can download a wide range of Coursera/Udemy courses. Udemy offers a wide variety of project-centered courses which I personally prefer a lot. You can also gain extra resume points from that.

Do ask your seniors, etc for their HR doc, and prepare one for yourself without fail. Write the answer to all generic questions over there."

*Varun Jha, HyperVerge BA*

"Resume and HR Prep is the most important thing to do (one should know how to present themselves in front of the interviewer). I strongly suggest writing down the answers to the questions you think can be asked in a doc."

*Medhavi Kapoor, Goldman Sachs*

# CONSULT

Note: These resources have been collated using responses by many senior students and should be used as per one's discretion only

[Click to access resumes](#)

[Click to access the preparation material](#)

## WEBSITES:

- To brush up on coding knowledge:  
[www.geeksforgeeks.org](http://www.geeksforgeeks.org)

## BOOKS:

- Case Interviews Cracked
- IIMA Casebook
- 64 HR Questions
- Heard on the Street (Quant)
- Guesstimates (given in preparation material)
- Day 1.0
- Casebooks from various B-Schools

## OTHER RESOURCES:

- Case Interview Cracked Youtube Video Playlist:  
<https://youtu.be/6eKf3AArVbg>
- Puzzles from sources provided by Analytics Club
- Victor Cheng Case Interview Youtube Video Playlist:  
<https://youtu.be/fBwUxnTpTBo>
- [https://gymkhana.iitb.ac.in/~ugacademics/new\\_research/index.php/category/career-cell/consult/](https://gymkhana.iitb.ac.in/~ugacademics/new_research/index.php/category/career-cell/consult/)  
(Link to blog series, please use VPN)

## GENERAL TIPS:

"Basic HR questions, understanding company values and background are always useful. Basic probability and quant questions can be prepared (only a few firms ask this)."

*Hiya Vithlani, NRI Consulting*

"I feel it is always better to be honest and real in your approach to answering questions based on HR, so just an HR doc with your own real answers would suffice."

*Sanya Jayee, Strategy&*

"Have a good case group to polish your case preparations. They are really crucial."

*Siddhesh Biyani, LEK*

"Use the website, [www.geeksforgeeks.org](http://www.geeksforgeeks.org) to brush up coding knowledge"

*Ujjwal Kalra, McKinsey Knowledge Centre*

"Apart from this basic HR prep, also having projects in ML helps as many industries want to utilize this powerful tool."

*Ayush Dahale, McKinsey Knowledge Centre*

"The very basic question that pops up in everyone's mind is 'which profile do I apply for?

I was not particularly inclined towards any domain & was fairly open to exploring. The very first thing I did was I discussed with some seniors of the same department, to get an overview of which domains & companies have opened in the past, and which ones can I target. Then, I scrolled through the Internship Blog and noted down the profiles/companies that I can target (based on whether they open for my department, B.tech./Dual, and if there are any other requisites). Furthermore, to understand the work that each profile entails & the type of preparation required, I read the internship blogs of the domains/companies I shortlisted on Insight's & UGAC's page. Having done some research I was fairly equipped with the understanding of what exactly I can target & what preparation needs to be done.

Talking to seniors really helps, to develop a better understanding of what to expect, how to progress & some reality check of the entire process. So don't hesitate and feel free to reach out to as many seniors as you want! Networking is the key here!"

*Kirti Agrawal, Proctor and Gamble*

"When the resume submission deadline for the third-year students' internship season is announced, It happens (happened with me too) that people are clueless about where to start and there are a lot of unanswered questions resulting in panic. The best thing to do in such a scenario is just to talk to any senior because most of them have already been through a similar situation and can give valuable advice.  
(contd.)

As I did not have prior internships when I was entering my third year, I wanted to treat this opportunity to explore things so I was open to applying for almost any profiles that I found interesting. It is helpful if you have your priorities for profiles sorted, as then you can make your resumes tailored to that profile, but even if you are not sure you can just utilize the option of uploading five resumes on the portal. It is very important in my opinion to make resumes based on profiles you plan to apply for.

Also, do go through the previous year's internship portals, they have a lot of info about which firms offer internships, also that helps in networking as you can find people who got selected in firms that pique your interest. Utilize the time before the semester starts to prepare for your profiles and preparation info can be found on different blogs (particularly **Insight** and **UGAC**), talking to seniors help in getting some deep insights. Also, it's preferable to be ready with your interviews as there isn't much time between tests and interviews, in most cases. And the last and the most important piece of advice is not to get disheartened if you are not selected in any particular profile as there will be a lot of opportunities coming your way!"

*Ayush Dahale, McKinsey Knowledge Centre*

# IT/SOFTWARE

Note: These resources have been collated using responses by many senior students and should be used as per one's discretion only

[Click to access resumes](#)

[Click to access preparation material](#)

## WEBSITES:

For coding prep:

- [www.codeforces.com](http://www.codeforces.com)
- [www.geeksforgeeks.org](http://www.geeksforgeeks.org)
- [www.leetcode.com](http://www.leetcode.com)
- [www.codechef.com](http://www.codechef.com)

For problem solving:

- [www.interviewbit.com](http://www.interviewbit.com)
- [www.keras.io/examples/](http://www.keras.io/examples/)

For puzzles:

- [www.gurmeet.net/puzzles/](http://www.gurmeet.net/puzzles/)

For coding practice:

- [www.hackerearth.com](http://www.hackerearth.com)
- [www.hackerrank.com](http://www.hackerrank.com)

Deep learning:

- [www.coursera.org/specializations/deep-learning](http://www.coursera.org/specializations/deep-learning)

## BOOKS:

- Cracking the Coding Interview (by Gayle Laakmann McDowell)
- The puzzle part in a book called DAY 1.0 has questions which help to understand the concepts and it is very useful

## OTHER RESOURCES:

- MITCourseware (Online CS courses)
- edX courses
- mycodeschool (for data structure and algorithms)
- [www.coursera.org/specializations/data-structures-algorithms](http://www.coursera.org/specializations/data-structures-algorithms)
- [www.palantir.com/2014/10/how-to-ace-a-software-decomp-interview/](http://www.palantir.com/2014/10/how-to-ace-a-software-decomp-interview/)  
(for Decomposition Problems, not very relevant to internships through PT Cell)

## GENERAL TIPS:

"Dynamic Programming (DP) is very important and almost every company asks at least one problem on DP, be it a test or a tech interview.

One can practice DP on [www.interviewbit.com/problems](http://www.interviewbit.com/problems). There is a series of standard Dynamic Programming problems on [www.geeksforgeek.org](http://www.geeksforgeek.org). Have a look at the LRU cache problem which companies such as Microsoft and a few others tend to ask on [www.interviewbit.com](http://www.interviewbit.com). On interviewbit, you can solve in the order: DP, trees, graphs, arrays and you can (if you have time) solve problems on other data structures.

*Shashank Agarwal, APT Portfolio*

"Cover data structures, design and analysis of algorithms (primarily divide and conquer, dynamic programming and greedy algos). The probability course curriculum in the respective departments is enough for probability preparation. Resume and HR Prep is the most important thing to do. I strongly suggest writing down the answers to the questions you think can be asked in a document"

*Medhavi Kapoor, Goldman Sachs*

Some company-specific details:

### Samsung Korea

- 1st round is a coding test, but that is not very relevant
- Shortlists are done on the basis of CPI and JEE ranks
- 2nd round is an interview

### Google

- 1st round shortlists done on resume basis, is a bit random
- From 2nd round onwards there are coding interviews

### Rubrik, Uber, DE Shaw, Microsoft

- 1st round is a coding test. Rubrik having a significantly hard test, others are decent
- There are 2-3 rounds of technical interviews after that
- These set of companies don't pay much attention to CPI, they focus mainly on coding / DSA

### Tower Research Capital

- 1st round shortlist on resume basis
- 3 rounds of technical interviews after that
- CPI plays a good role here

"All the above-mentioned companies are ones that are Day one companies. Some other good companies such as Jane Street, Cohesity, and Adobe come later on in the season. Hence, don't be adamant about getting a day one internship, apply for only those internships that you would genuinely want to go for."

*Tathagat Verma, Microsoft*

# HR Interview

Note: These resources have been collated using responses by many senior students and should be used as per one's discretion only.

[Click to access the preparation material](#)

## WEBSITES:

- For decomposition problems:  
[www.palantir.com/2014/10/how-to-ace-a-software-decomp-interview/](http://www.palantir.com/2014/10/how-to-ace-a-software-decomp-interview/)
- For company-specific interview questions:  
[www.geeksforgeeks.org](http://www.geeksforgeeks.org)
- [Codeforces](#) and [Leetcode](#) are also good resources for interview rounds.

## BOOKS:

- Cracking the Coding Interview (by Gayle Laakmann McDowell)
- Case Interviews Cracked
- 64-HR Questions
- Heard on The Street (aptitude questions)

## GENERAL TIPS:

"Do ask your seniors and friends for their HR document and prepare one document for yourself without fail. Write the answers to all generic questions over there."

*Varun Jaha, HyperVerge BA*

"It is always better to be honest and real in your approach to answering these questions. So just an HR doc with your own real answers would suffice."

*Sanya Jayee, Strategy&*

"Always collect some data about the company via their website or maybe LinkedIn page so that you can impress the HR that you're really interested in working with the company."

*Shashank Agarwal, APT Portfolio*

# OTHER PROFILES

Note: These resources have been collated using responses by many senior students and should be used as per one's discretion only.

## PRODUCT SUPPLY/OPERATIONS

"I used HR and analytics material from the Bluebook resources."

*Kirti Agrawal, Proctor & Gamble  
Product Supply Intern*

"Talk to seniors who had previously been selected for internships here as the interviews are mostly HR based."

*Priyanka Bagade, Proctor & Gamble  
Product Supply Intern*

"Look at resumes of past year interns."

*Mustafa Burhani, Proctor & Gamble  
Product Supply Intern*

"Solved some quant and did some HR prep."

*Lokesh Moond, Udaan  
Operations*

## ANALOG

"The 'Design of Analog CMOS Integrated Circuits by Behzad Razavi' is an excellent book for preparing for the analog design field."

*Shrey Singhai, Micron  
Analog Design*

"To crack the tests and interview in elec core, focus on the basic concepts that you have learned in your 2nd year, revise everything once before the test."

*Aseer Israr Ansari, Texas Instruments  
Analog Intern*

### ASIC

"Practice coding problems as much as you can. [HackerRank](#) and [codeforces](#) are a good place to prepare. Dynamic Programming, DFS, BFS are few algorithms that are asked frequently. Make sure you are able to explain every project on the resume to every detail. Few good projects are better than many projects.

Nvidia specific: Focus on digital electronics, coding problems asked are very basic."

*Lalit Saini, Nvidia*

*ASIC Intern*

### CORE, CHEMICAL ENGINEERING

For developing a core profile, I did some projects under our department professors and prepared for core group discussions. The topics that one should definitely revise to prepare for the same are Thermodynamics, Heat and Mass Transfer, Pumps, Fluid dynamics, etc. Also, for HR interviews, I used the book '64-HR Questions'."

*Bhavik Soni, Dr. Reddy*

*Core, Chemical Engineering*

### UX DESIGN INTERN

"Used How to Answer The 64 Toughest Interview Questions (A PDF guide), and Maaike's Resume Making Guide-  
[www.gumroad.com/l/resumeguide](http://www.gumroad.com/l/resumeguide)"

*Rishabh Kumar, Microsoft*

*UX Design Intern*

# **NOTE**

We hope you find the booklet useful and it aids you in your internship preparation.

Although the contributors have made every effort to ensure that the information in this booklet was correct at the time of launch, they do not claim it to be completely reliable/relevant for current times as activities during internships can be dynamic, and this booklet is strictly based on the responses and experiences of seniors of the past year. Past Information is not a reliable indicator of future results. The details can greatly fluctuate as a result of company policy and are not guaranteed.

The authors/any individuals involved are not to be held responsible for the misuse, reuse, recycle, cited and/or uncited copies of content within this booklet by others.

We have put our best efforts into compiling the booklet and presenting the information to you. However, if some inadvertent errors might have crept in, we would be glad to be informed regarding the same.

We are open to suggestions and ideas from your side to improve the booklet. Please feel free to contact the UG Academic Council members.

