Attaining Technical Excellence:
Make Top Tech Companies Hire You

Farhan Bashar

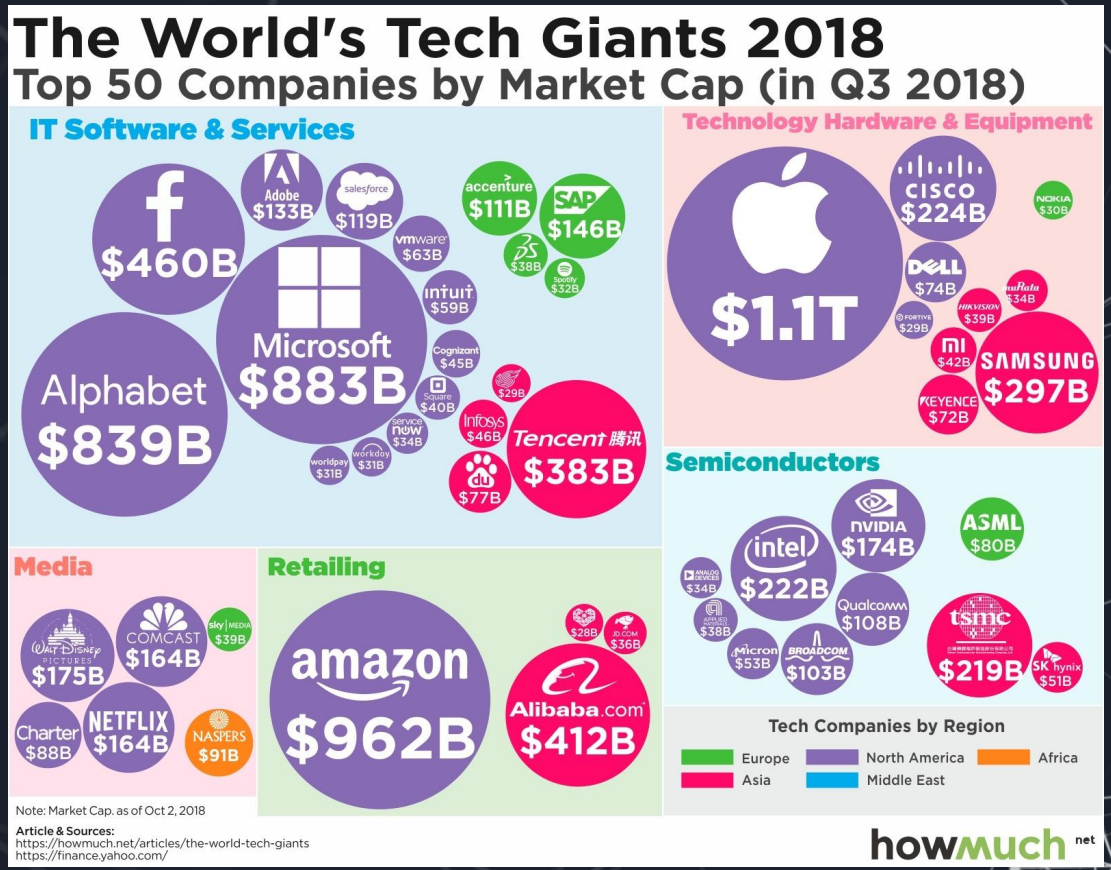
IUT CSE'08

Software Development Engineer III

Amazon

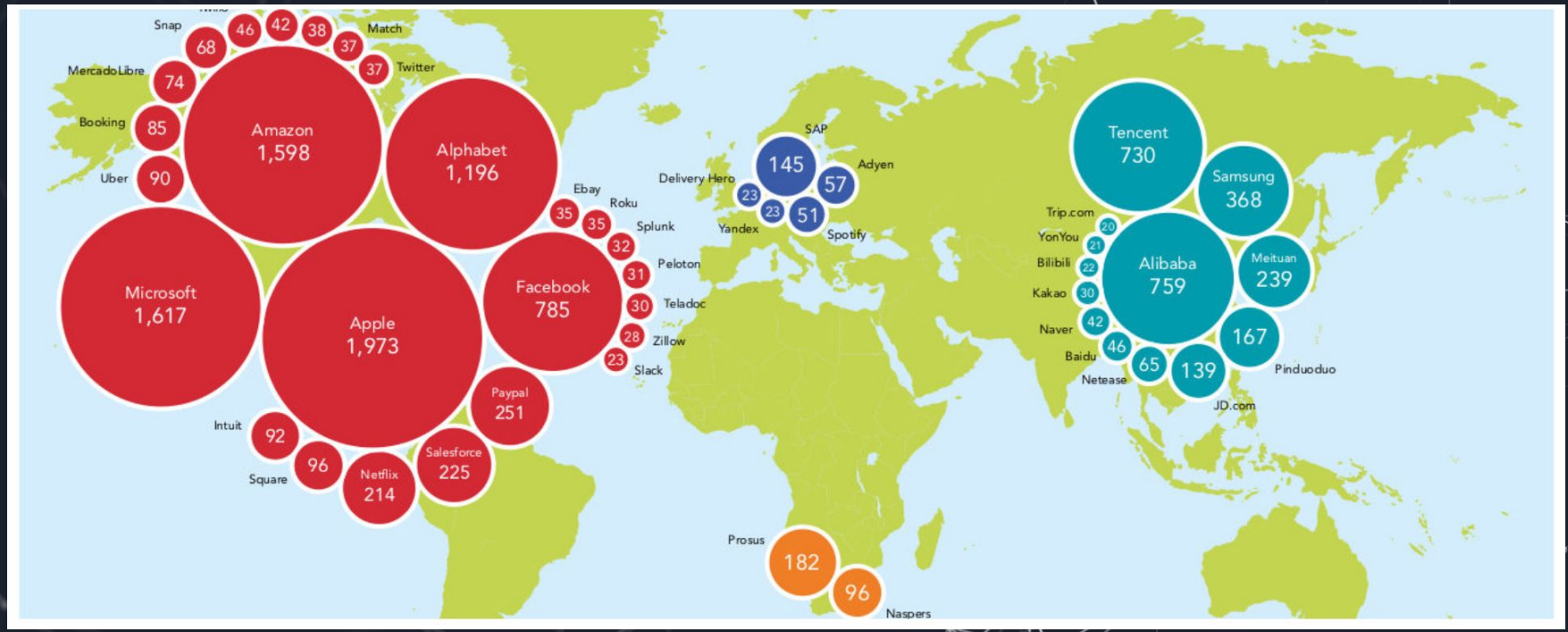
What?

amazon
Microsoft
Google
NETFLIX
VISA
Coca-Cola
accenture
Ford
pepsi
NIKE
mastercard
STARBUCKS COFFEE
McDonald's
intel
citi
IBM
AMERICAN EXPRESS
FedEx
PayPal
Adobe
AT&T
3M
hp
P&G
WALT DISNEY
Abbott
CAT
Colgate
MERCK
Cadbury
QUALCOMM
Pfizer
BOEING
GM
Bank of America
Johnson & Johnson
JPMorganChase
Honeywell
ExxonMobil
BLACKROCK



- FAANG
- FAANGMULA

Where?


Snap
68
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Match
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Twitter
MercadoLibre
74
Booking
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Uber
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Amazon
1,598
Alphabet
1,196
Microsoft
1,617
Apple
1,973
Facebook
785
Ebay
35
Roku
35
Splunk
32
Peloton
31
Teladoc
30
Zillow
28
Slack
23
Paypal
251
Intuit
92
Square
96
Netflix
214
Salesforce
225
SAP
145
Adyen
57
Delivery Hero
23
23
Yandex
51
Spotify
Tencent
730
Samsung
368
Trip.com
20
YonYou
21
Bilibili
22
Kakao
30
Naver
42
Baidu
46
Netease
65
Alibaba
759
Meituan
239
139
167
Pinduoduo
JD.com
Prosus
182
96
Naspers

Why?

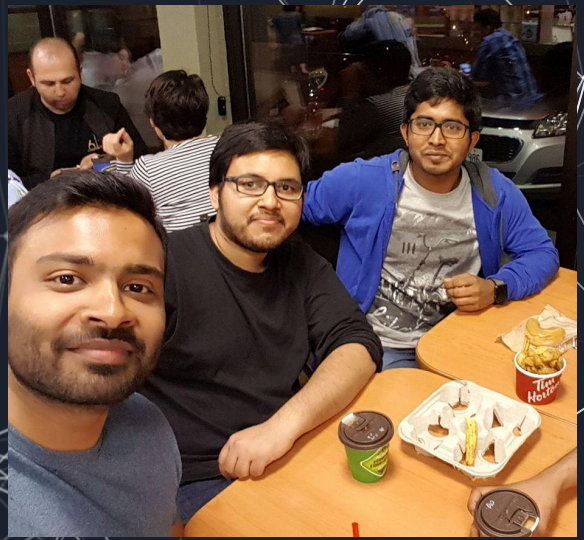
- Learning opportunities
- Career growth
- Excellent peers
- Working with latest tech
- Reputation
- Large scale impact
- And…

How?

- How to prepare from now?
- How to get recruiters attention?
- How to crack the interviews?

My time in IUT

- Joined 2009 and graduated in 2012
- IUTians joined FAANG: 0
- IUTians joined top tech companies: ~20

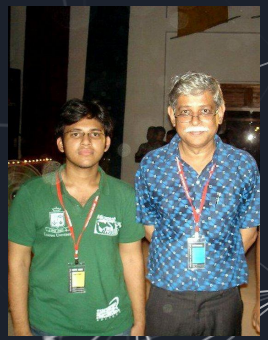


Today

- IUTians in FAANG: ~15
- IUTians joined top tech companies: >100

My Journey

- IUT (2009 - 2012)
  - Participated in NCPC/ICPC
    - ICPC Dhaka regional 2010-2011
- Samsung R&D Institute (2012 - 2014)
- Western University (2014 - 2015)
  - MS (Image Processing)
- Amazon (2016 - Present)



Step by step guidelines

Year 2-3 at IUT

- Algorithms and DS (Course)
- Problem solving in online platforms
- Participate in contests (online/onsite)
- Projects (Upload to GitHub)
- Develop creative projects!!
- Get fluent in Linux

Why competitive programming?

- Improves problem solving skills
- Develops logical thinking
- Reduce fear of handling complexities
- Adds resume value

Final Year at IUT

- Take thesis seriously !!!

Final Year at IUT

- Comparatively hard to get directly into these companies from BD
  - Visa regulations / Nationality prioritization
- If you are already in those countries, then its easier
- Apply for MS/PhD

Prepare for MS/PhD

- Publish 1 or 2 papers
  - Target conferences first
  - Extend and submit to a journal
- Sit for GRE/IELTS exams
- Email professors (100s of them)
- Get a job here
  - Enhances profile
  - Adds country tie

FAQ

Q: I didn’t get the thesis topic that I liked / couldn’t publish a paper / I have a low CGPA but I want to apply for MS/PhD. What can I do to improve my profile?

Apply for visa

- Getting Canadian visa is equally hard as getting admission
- Follow step by step guides provided in their websites
- Don’t submit fraudulent documents
- Apply by yourself instead of going through agency

During MS/PhD

- Apply for internship
  - Start applying at least 6 months before graduation
- Apply for full-time at the same time
- Improve Resume and Linkedin profile
  - Side projects (github)
  - 1 page resume (recommended)
  - Quantitative results
  - Your contribution to projects (Tech term)
  - Review resume by others
- Connect with recruiters / existing employee using linkedin

Interview preparations

- LeetCode medium/hard problems
- Read books
  - Elements of Programming Interview
  - Cracking the coding interview
- Mock interviews with peers (Pramp, Interviewing.io)
  - Existing FAANG employees
- Develop communication skills
- Practice, practice, practice

FAQ

Q: I don’t like competitive programming but I do a lot of software development and have strong system design knowledge. Aren’t this enough for the tech companies?

FAQ

Q: I don’t like competitive programming but I am pretty good at machine learning (Deep learning). Aren’t this enough for the tech companies as research position?

Interview steps

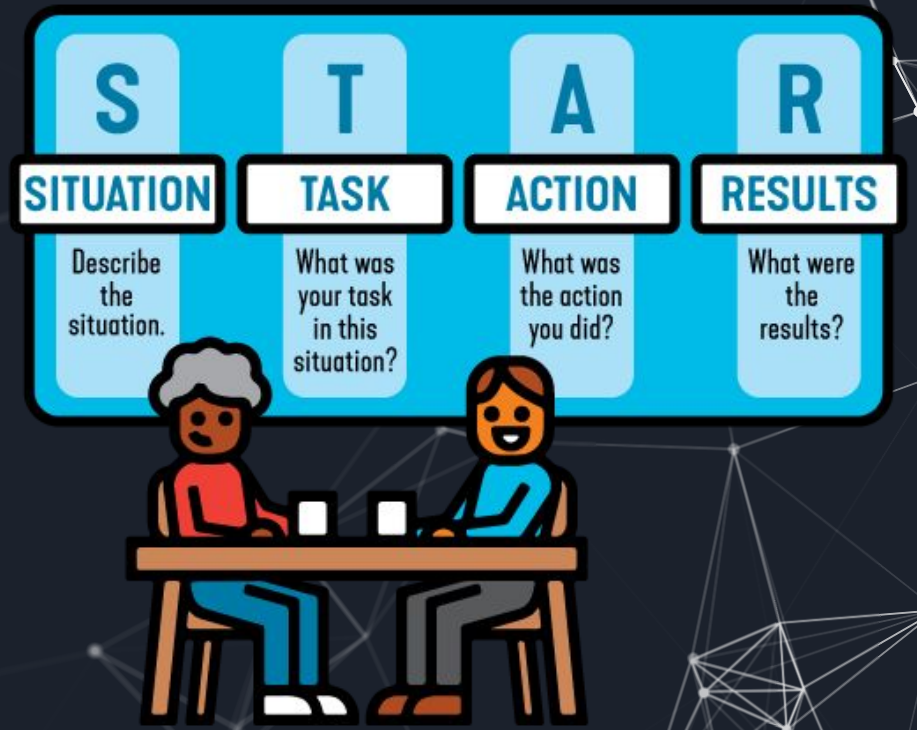
- Phone screen with recruiter
  - Discuss background (update resume, add key/buzz words)
  - Discuss job description
  - Fit to the role
- Online assessment
  - Technical problem (online)
  - clean code and comments
  - Behavioral scenarios
- Technical phone interview
  - Coding problem
  - Behavioral questions
- Onsite interview
- ** Every step is equally important

Onsite interview

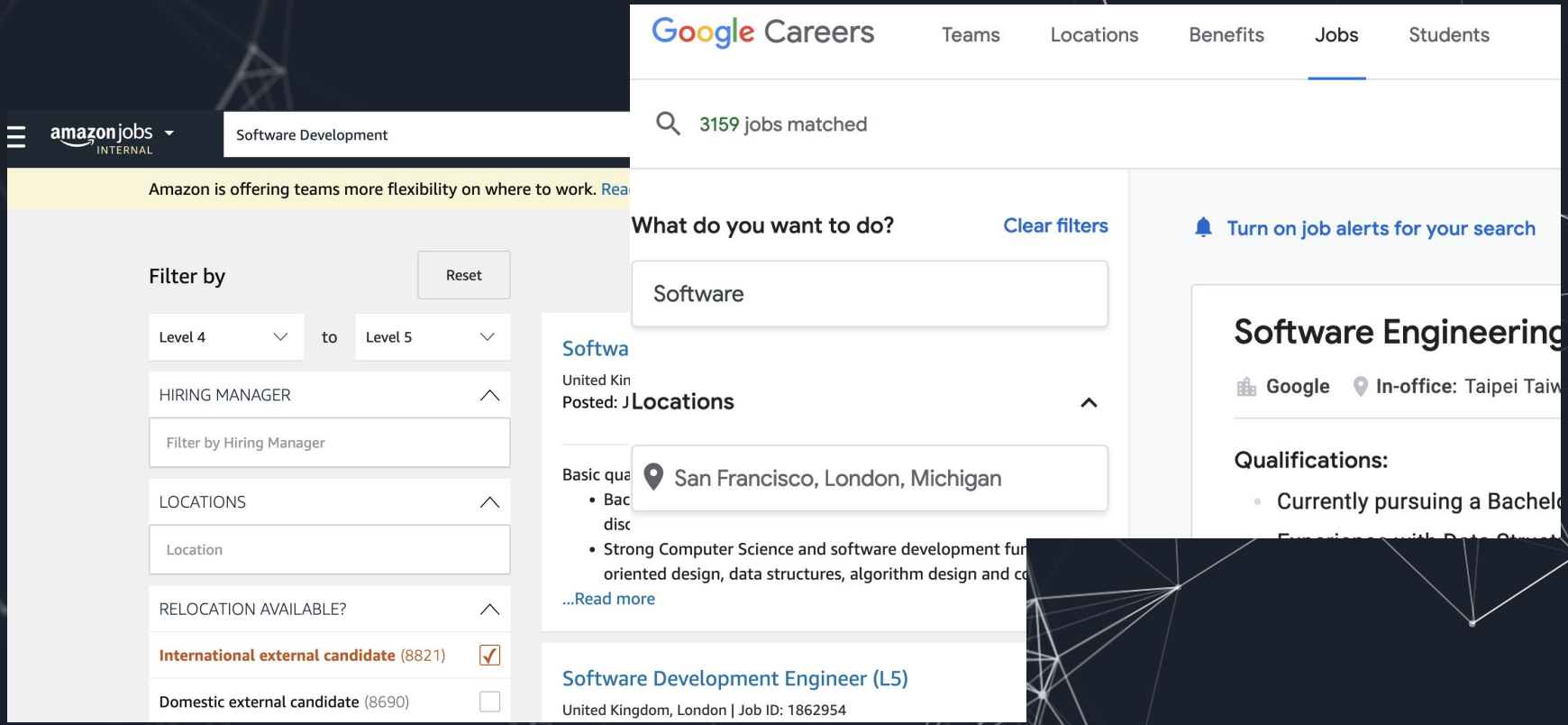
- Data structures and Algorithms
  - Runtime and space complexity
- Logical and maintainable
  - OOP concept
  - Interface / inheritance
- Problem solving
  - First come with a solution
  - Discuss optimization after that

- System design
  - Scalability
  - Latency
  - Call volume
  - Authentication
  - Synchronous/Async

Behavioral Questions



Current vacancies



Resources

Problem Solving:

- https://leetcode.com/
- https://www.hackerrank.com/
- https://www.crackingthecodinginterview.com/
- Elements of Programming Interview(Book)

Mock Interview:

- https://interviewing.io/
- https://www.pramp.com/

System Design:

- https://www.educative.io/courses/grokking-the-system-design-interview
- https://www.algoexpert.io/systems/fundamentals
- Youtube videos

Behavioral Questions:

- https://www.levels.fyi/blog/amazon-leadership-principles.html
- https://managementconsulted.com/amazon-leadership-principles/
- https://blog.dayone.careers/amazon-interview-questions/

Q&A