# The Last Hurdle

Getting a Job as a Software Engineer After College

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Before We Start...

- This is almost entirely anecdotal!

- ~4 years of on-and-off research as I pursued my degree
  - My passion ultimately lies in this stuff
  - I don't get anything from this presentation -- I just wish someone taught me it in your position
  - Online research and ~20 interviews experience

- This stuff works!

  - Every student that has followed this advice has signed an offer for post-degree employment

  - Interviews at Google, Microsoft, Blizzard, Uber, Pandora, Ubisoft, Garmin, IGT, Zoc[
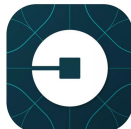
Before We Start...

- Listening and participating can gain you three important things

  o   A job

  o   Extra credit

  o   Cookies

- Take notes if you want, but this presentation is on the class GitHub

What You "Know" Now

- Or, what I knew in your shoes...
- Go to school
- Pay attention
- Do your assignments
- Get good grades
- Apply for a few jobs
- Interview, showing you know what a pointer, a linked list, a binary tree, and log(n) sorts are
- Get an offer
- Make bank

The Job Process(es)

- Application
- Phone Screen(s)
- Remote Technical interview(s)
- On-site technical interview
- Offer
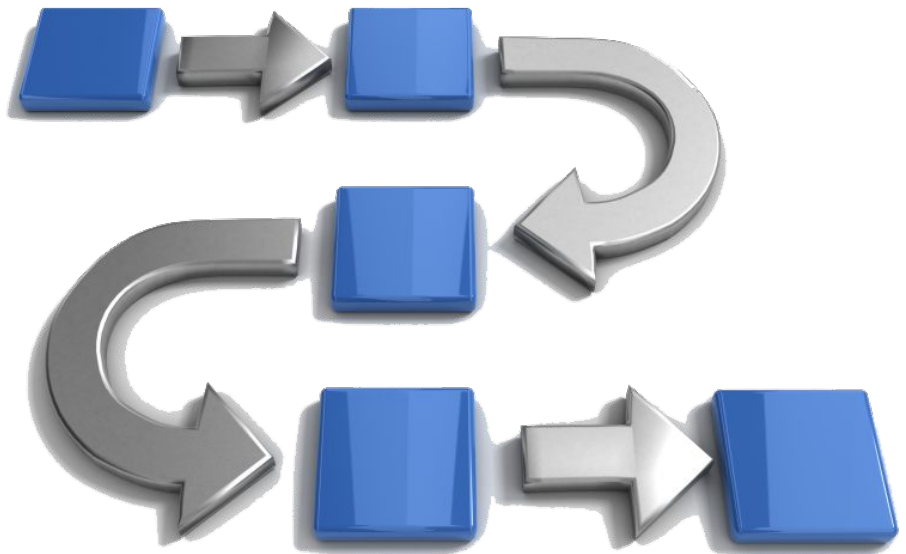
The Application Stage

- **75%** of resumes are screened out by a recruiter or resume screener

- **6 seconds** spent reviewing the average resume
  - **4 of the 6 seconds** spent looking at the important stuff
    - Job titles, experience, education

- **61%** of recruiters will disqualify a candidate because of resume typos

- **76%** of resumes with "unprofessional" email addresses are rejected as a result

- **Customize your resume** for job openings
  - Emphasize what the position wants

The Phone Screen

- "Do our interests match?"
- Know what you want from a company
  - "Money" is an acceptable answer, but not the best
- Do your research
- Would they want to work with you?
- Don't stress about tough problems or brain-teasers
  - … but be prepared.
  - Primarily Microsoft doing this now
- Verifying your experience
  - Know your resume, and don't lie about it!
    - Seriously. Before you get an offer, they'll see your transcripts.
- You may encounter more "softball" tech questions

Remote Technical Interview

- **Half of getting a job**

- Expect tough questions

- Practice, practice, practice

- Know your data structures and learn your algorithms

- Some popular interview questions:

  o Find consecutive integers in a list that give the largest sum

  o Find a repeated element in an array

  o Find the lowest common ancestor of two nodes in a binary tree

- **Do not memorize solutions**

  o Frequently, interviewers will use subtle variants of questions

  o No one -- not Google, Microsoft, or Facebook -- have a list of interview questions to ask

On-Site Technical Interview

- **The other half of getting a job**

- Experience and success rate can vary wildly depending on company
  - Google hires 25% of on-site interviewees
  - Other companies have shown a rate closer to 80%

- Approximately the same questions as phone interview, **but on a whiteboard**
  - Maybe slightly harder

- Practice, practice, practice (more)

- **Always talk through your thought process**

The Offer

- **Always try to negotiate**
  - If you're reasonable, asking for more salary or additional benefits can't hurt
  - Everyone I know that has negotiated has received what was requested

- Make sure the company knows your other outstanding deadlines

- Hurry other companies along once you receive an offer

- Reneging is bad (but not unheard of)

What We Wish We Knew

- **Requirements lists are wish lists, not requirements lists**
  - … for the most part.
- Start applying early
  - Prime interviewing season for *bigger* companies means applying eight months before you graduate
  - Six months before graduation for most of the rest
- There's more than just Google, Amazon, Microsoft, and Facebook out there.
  - Google accepts 0.2% of their applicants – it's possible, but don't bank on it
  - Striving for these companies *will*, however, improve your odds across the board
- **Don't get discouraged**
  - 68 rejections and *hundreds* of non-responses, but nine offers total between the group of four I looked at

What We Wish We Knew

- Personal projects matter. A lot.

  - **A personal project is equivalent to** *a job you can give yourself, for free, by choice, on your resume*

  - Once you have a job, that additional knowledge leads to quicker raises and promotions

- LinkedIn (networking in general) is also very important

  - Many of us received invitations to interview with Google via LinkedIn, and I receive ~5 interview requests monthly

- Oregon Tech grads are not Computer Science majors

  - SWE and CS each have unique benefits, but most companies interview assuming CS knowledge

  - Make sure you fill in the gaps algorithm- and data structure-wise

- Getting an "A" is not getting the material

Personal Projects

- Pick a tech, learn it, commit it
- GitHub can become your de facto resume
- Many companies will interview you purely on projects you've worked on
- Even with a lesser GPA, having personal projects puts you *miles* ahead
- Some examples from the senior class
  - A Major League Baseball library (C#)
  - A game engine (C++)
  - A Twitch helper application (C#)
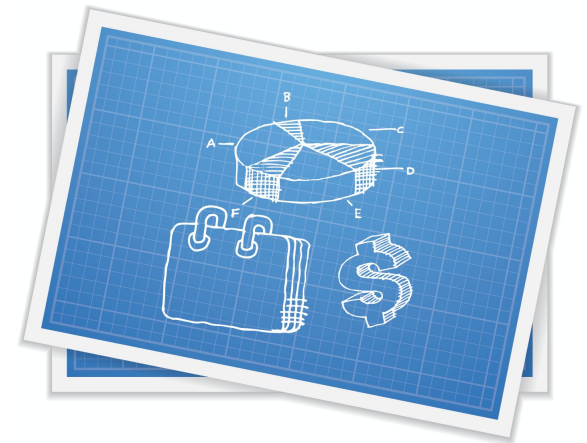
What You (Should) Know Now

- Getting a job is like a competitive game -- if you want something nice, you *have* to be educated in how to play

  - Hopefully this PowerPoint has shed light on the basic rules of the game

- Apply early – or dramatically lower your odds of landing your dream job

  - Applications should be going out October of your last year

- **Work on personal projects**

- **Be prepared for the world of technical interviews**

  - Almost an entire field of study and industry on its own at

Questions? Comments?

Senior Class Job Outlook

GPA (req'd)	# Jobs/Intrnshp	Starting Salary (req'd)	Location (req'd)	Signing Bonus
3.15	0	$60,000.00	Madison, WI	$1,500.00
3.50	0	$64,000.00	Reno, NV	$2,000.00
3.32	2	$65,000.00	Madison, WI	$0.00
3.76	2	$67,000.00	Boston, MA	$3,500.00
3.80	1	$67,000.00	Boston, MA	$3,500.00
3.94	3	$70,000.00	Washington DC	$10,500.00
3.35	1	$72,000.00	Boise, ID	$8,500.00
	2	$95,000.00	Madison, WI	$10,000.00
3.20	1	N/A	N/A	N/A
3.75	1	N/A	N/A	N/A
3.11	0	N/A	N/A	N/A
3.37	0	N/A	N/A	N/A

Resources

- Applying
  - ["The 152 Companies I applied to, if it's of any use*"](#)
  - [Googling for job openings](#)

  - [Handy list of quick applications](#)

  - [Indeed.com](#)
  - [LinkedIn Job Search](#)
  - [TwitchTV software internships](#)
- Resumes
  - [The Google Resume: How to Prepare for a Career and Land a Job at Apple, Microsoft, Google, or any Top Tech Company](#) by Gayle Laakmann McDowell

Resources

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- Interviewing

o This class!

o **Cracking the Coding Interview: 150 Programming Questions and Solutions** by Gayle Laakmann McDowell

o **Programming Interviews Exposed: Secrets to Landing Your Next Job, 2nd Edition** by John Mongan, Noah Suojanen, Eric Giguere

o **HackerRank.com**

o **Leetcode.com** , **CareerCup.com**

Offers

- GlassDoor.com
- Salary Negotiation: Make More Money, Be More Valued

Data from this presentation

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Thanks & good luck!