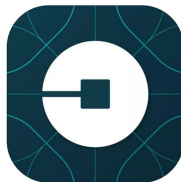


title

Getting a Job as a Software Engineer After
College

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, ZocDoc, CIA



Before We Start...

- Listening and participating can gain you three important things
 - A job
 - Extra credit
 - Cookies
- Take notes if you want, but this presentation is on the class GitHub



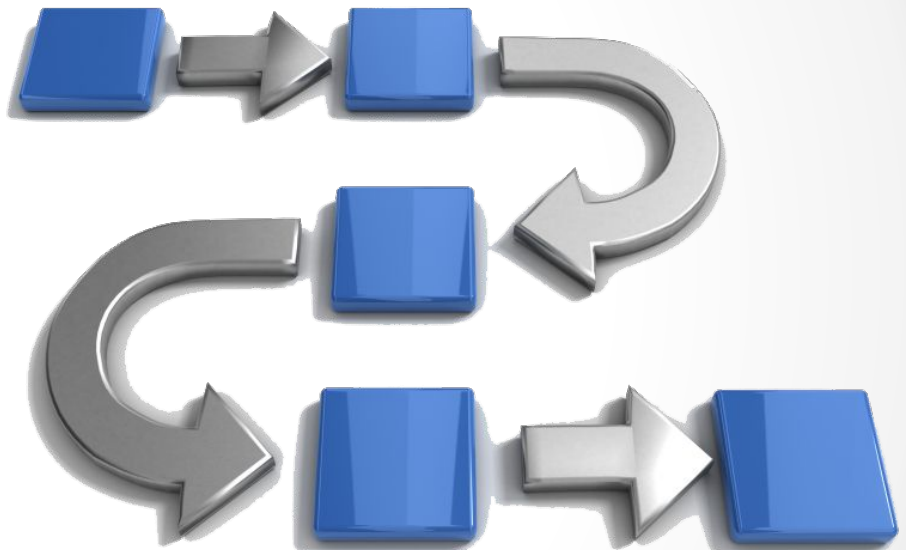
What You “Know” Now

- 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 k 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:
 - Find consecutive integers in a list that give the largest sum
 - Find a repeated element in an array
 - Find the lowest common ancestor of two nodes in a binary tree
- **Do not memorize solutions**
 - Frequently, interviewers will use subtle variants of questions
 - 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

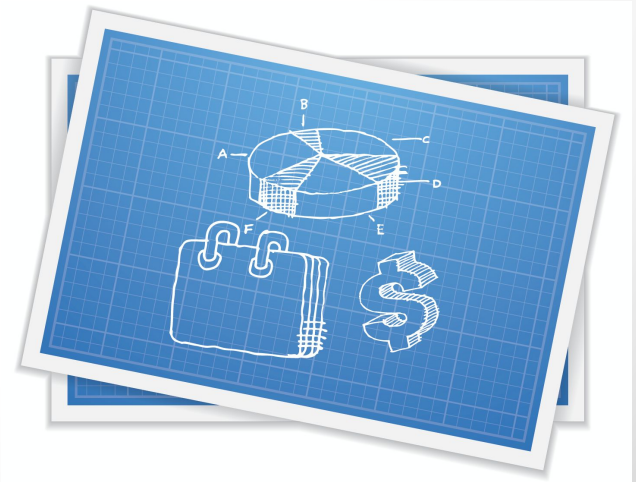
- **Requirements lists are wish lists, not requirements lists**
 - ... for the most part.
- **Start applying early**
 - Prime interviewing season for *bigger* companies means applying eight months before you graduate
 - Six months before graduation for most of the rest
- **There's more than just Google, 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
 - Classes can vary wildly in difficulty by both subject and professor

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 this point



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](#)
- 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

- Interviewing

- This class!
- [Cracking the Coding Interview: 150 Programming Questions and Solutions](#) by Gayle Laakmann McDowell
- [Programming Interviews Exposed: Secrets to Landing Your Dream Job, 2nd Edition](#) by John Mongan, Noah Suojanen, Eric Giguere
- [HackerRank.com](#)
- [LeetCode.com](#)
- [CareerCup.com](#)

- Offers

- [GlassDoor.com](#)
- [Salary Negotiation: Make More Money, Be More Valued](#)

- Data from this presentation

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