

## BiSA CV/Resumé Workshop, November 13, 2019

### Tips from Recent Alumni

#### MADDIE - PhD, Post-doc

Difference in responsibilities between graduate student and postdoc

1. I was assigned a project, but have more independence in how to pursue it than I would as a graduate student
2. In my case, I feel like being a postdoc is more milestone based but again how you get there is up to you
3. Not so much for me, but things I have noticed with other postdocs in my lab is that they get more responsibility in lab logistics and are required to mentor new graduate students
4. Differences in taking time off, required to officially request leave through UD webforms

Interview questions

1. Tell me about yourself (the most common and usually the first question)
2. What programming experience do you have? What languages do you usually work with?
3. What NGS analysis experience do you have? (Usually asking about RNA-seq)
4. What do you think are the benefits and limits of machine learning/big data?
5. Specifics about PhD project (machine learning/genome assembly)
6. Questions about experiences working in a team
7. Why do you want this job? (another common one especially on initial phone interviews)

#### PARTH - PhD, Industry

Most frequently asked questions that might be important (I think!) will be:

1. Where do you see yourself in 5 yrs?
2. Why did you apply with our company ?
3. Why us over other competitors?
4. Why did you choose industry over academia?

How difficult was it to obtain a work visa after graduation? Can you let me know the steps you took to procure one? Did the company sponsor you or did you have to apply yourself?

- It's a tricky situation right now. Most of the companies won't file H1B visas right away. They would prefer to assess candidates for 6 months to a year before applying for their visas. I think candidates should definitely discuss their visa situation in the initial interviews and clearly mention that they will need visa sponsorship. They should also emphasize visa sponsorship to the hiring manager before accepting an offer.
- Meanwhile, they will have to use OPT to work after graduation and before company applies H1B. I'm sure our international students are aware of OPT as this one has to be filed with UD's international student office.

## **MODUPE - MS & PhD, Clinical research (St. Judes)**

1. To make sure the first page has all the information you want the job interviewer to know: Education and Skills. The rest they rarely look at it unless you've already got their interest in the Education and Skills section.
2. The skills section should always emphasize the skills the job description/qualifications want.
3. Get feedback from other people in your field on what they included in their resume, because my layout was a compilation of other student's resumes who were willing to share theirs with me.
4. The cover letter is most times more important than the resume, because it's your pitch on why you will be a good fit for the job, it should emphasize your experience as it aligns with the job qualifications.
5. The easiest part is applying with a great resume and cover letter, once the interview is requested, spend a lot of time researching the company: culture, benefits, reviews (on glassdoor), interview process, prospective managers or interviewers and prepare your questions, and also if the company is a real fit for your career goals.
6. A rejection means there are better options out there, and look at it as a step forward.
7. Apply early to get a feel of the interview process, I started applying a year before and it got me prepared for what to expect when I needed to get a job, and more comfortable during the interview process.
8. A question every interviewer ask is "Tell me about yourself", typically means give a pitch on your experience, accomplishments, future plans and how it fits with the company you are applying to.
9. I applied for a lot of jobs (all online from the different job sites: linkedin, glassdoor), did 10 phone interviews, 3 video interviews, 2 onsite interviews, rejected 2 follow-up interviews (because I had already accepted a job) & got 2 job offers before graduation.
10. Make sure you actually apply for the jobs on the company's website if possible or send a direct email if provided, because most of the company's don't look at the job sites (learnt that after applying for a job twice and got a follow-up after I applied on the company's website)

## **MATT - MS, Industry**

I think the first thing I should mention is the importance of formatting during personal (human-human) vs computer (human-resume db- human) interactions during the job search.

I used LaTeX for my thesis and my "pretty" resume PDF, but it's really only readable by people; difficult to parse and import into a database. It's worth noting that markdown, Rmd and pandoc use Latex frequently for advanced typesetting, and most publications offer both latex and MS formats.

For the resume you put in to an online application, it should almost always be .txt, .rtf, or even plain unformatted .docx, just information with indentations and whitespace, not columns/tables.

The position I applied to made extensive use of NGS data downstream (expression matrices), and often were experienced points of contact for upstream concerns (pipelines, processing). The position had much more emphasis on supporting infrastructure and

I altered the experience section of my resume to summarize why experiences during rotations with those laboratories were relevant in terms of literature knowledge or familiarity with molecular biology techniques that provide conversational topics with laboratory scientists i would be working alongside of. I found an important common ground in the NGS skills needed (somewhat) by the group I was applying to and the experiments and code I had worked on in grad school.

There were some responsibilities that were unexpected, namely web server maintenance, log monitoring, and some sysadmin basics, automation, code cleanliness and software eng maturity, basic client/server emphasis, documentation, reproducible research, and graphics/report generation. Cloud knowledge, templating, code organization, and some other aspects of metaprogramming or mature coding were also not listed directly in the job description.

Weaknesses in my \*portfolio\*, not my resume per se, included very basic MySQL and PostgreSQL exposure, compared to the level of data stored and routinely...exposed?...to the end users through web applications, maintenance and analysis of which can require more familiarity with SQL. Describing MVC apps I had in the past made it apparent that I had at least some familiarity with the frameworks and importance of database apps, and evidence enough that I had built at least one app.

The coding test in the interview was tough and demanding, Rosalind.info style challenges. I honestly think the program could use one or more workshops where students just work through the problems on their own...maybe they would make good problem sets for a course's homework. I practiced these in my spare time after I graduated the bioinf program to supplement my knowledge.

Most of the other questions during the interview are subjective stories about demonstrating teamwork or persistence in the face of obstacles. It's a good point that specific stories might make good additions to a long form resume.

## **JOE - PhD & MS, Industry**

### *Advice When Applying*

1. Up-to-date CV and make sure to proofread (3-4+ pages for PhDs, 1-2 pages for Masters). VERY IMPORTANT first 2 pages must show the most important things you wish to convey. If your CV is hard to decipher it will get passed over.

Note: If you apply with a 1-2 page resume for a PhD level role, it goes nowhere (learned the hard way)

2. If you have lack of papers (aka my CV), expanded on the skills you have (things future employer may want to see and they care about more)

3. Have a LinkedIn profile (up-to-date) --- if you can afford to pay for the membership, do it! My LinkedIn profile picture is not the best--- I fail at the profile picture part, but rest of profile is good. Also, LinkedIn is AWESOME for networking with headhunters for jobs (they seek you out for good jobs).

4. Have a Github page with good examples of your code and program development.

5. Network, Network, Network! Reach out to alumni or friends that are at a company and get feedback/help applying.

Note: At some companies employees can see who the hiring managers for jobs (helps you for a phone screen to know their background and think of questions) and sometimes the employee can get referral bonus if the individual is hired (everyone wins in the end).

6. Plan to apply 3-6 months ahead for a job, BUT important some jobs offers come through in 2-3 months and part of the stipulation is you start sooner than you graduate. Make sure to discuss with your research PI if you can leave early (writing remotely is o.k.--- WARNING if 50% of your thesis isn't done, could be a big problem).

7. BUZZWORDS are the golden ticket to make it through HR filtering. The majority of time the HR recruiter knows very little about biology and rely on buzzwords/education/work experience to filter CVs.

8. Also, a lot of online application questions for jobs sometimes automatically filter applicants, so try to limit saying "no" to questions if your background fits into a grey zone for answering the question (Example: job requires 3 year or more of experience and you have 2.5 years of experience). But, very important don't lie about your background/skillset.

9. Don't rule out contractor roles (1-2 year contracts), they can help you gain further skills and network at a company. IMPORTANT if an international student DO NOT take a contractor role (unless desperate) because it could use up your OPT time that is extremely important for visa processing already and they most likely do not sponsor.

10. APPLY, APPLY, APPLY! Once you submit a job application, keep a record of where/what you applied for and forget about it! Thinking of "What if I get this job?" will drive you crazy.

#### *Advice for Interview Process*

1. Practice your presentation beforehand and keep it simple and understand your audience will be from a diversity of STEM backgrounds (to much details and it could kill/complicate the presentation).

2. Stress teamwork and show you know your project (limit "I" statements and being a know-it-all). I have seen candidates get killed for bragging/showing off too much.

3. Its o.k. to say "That's a good question, I don't know the answer" instead of faking it.

4. Dress nicely and prepare to talk to a lot of people all day

5. If you notice the people interviewing you are really rude/hostile--- think twice about taking that job and don't worry if you don't get it.

#### *Job Offer/Negotiation*

1. Know what the job market pays for the region you live in. Philly area \$90-110K for Computational Biologist PhD is typical range (Boston/San Francisco add \$20K more).

2. Try to get a moving package or signing bonus (never hurts to ask)

3. It's always o.k. to counter the first offer (ask for \$10K more, they split the difference increase by \$5K)

4. If the offer is really bad WALK AWAY! (I have done this and found out later this was a very smart move)

As far as cover letters go, I actually stopped using and never submitted if it was optional.

### **ALLEN - PhD, post doc at Danforth Plant Science Center**

One thing I recommend is to work in a biology lab with a purely computational co-mentor who is accomplished in your field of interest (such as publishing papers across disciplines). As bioinformaticians, it is important that you balance getting the training you need with doing the work that your PI needs done. Co-mentors can make sure that your training is balanced and thorough in multiple disciplines.

Network at conferences effectively. If you are a computational student working in a life sciences lab without a computational co-mentor, then I consider it essential that you have a diverse committee. Make sure you attend conferences with these committee members and network (in addition to just discussing your research at committee meetings). This will open up opportunities across the disciplines and help you achieve the mobility you need in a dynamic field where the needed skillsets are rapidly shifting.

My plant sciences post-doc at the Danforth began with an introduction to my current PI through Blake Meyers (while he was still at UD). During my job interview, I could talk about work that I did with one of my committee members who is purely computational and in the plant sciences.

It is important to highlight the computational skills in your CV that will be applicable to ANY dataset, not just the ones you worked on during your PhD. This is one of the things that really catches the eye of someone you want to work for, because they don't want to know just what you've done but what you can do for THEM.