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ADVICE

Five Do's and Don'ts as a Postdoctoral Scholar

For students close to finishing their Ph.D. program, a natural question of “what next” may be answered by searching, applying, and getting a postdoctoral (or postdoc) position. A postdoc position in a dynamic and energetic group may advance your career significantly, by contributing to impactful publications, writing grant proposals, and providing funding for your research. For many, it can also be a precursor to landing a job as a professor. A successful postdoc tenure comes with the success of the postdoc, Ph.D. students, and the postdoc's mentor. Here are five do's and don'ts for a postdoctoral student.

DO'S

1. Work well with students. The life of a postdoc is different from the life of a Ph.D. student. While Ph.D. students focus on a single problem, a postdoc is expected to work on multiple problems and to collaborate with several Ph.D. students. New postdocs get motivated by their long Ph.D. journey, during which they have developed several skills. Such expertise may empower Ph.D. students. Your own experience may not only save their time, but may also put some weight in building strong collaborations with these students.

2. Inspire students. The postdoc tenure comes with several responsibilities. You are not responsible just for yourself but are also responsible for the entire group of B.S., M.S., and/or Ph.D. students. Your experience, knowledge, and wisdom may help all students. Recall the struggles you faced during the start of your Ph.D. and build on it to motivate students and help them



succeed. A postdoc always needs to remember that the students' successes are your success (and students' failures are your failure).

3. Help your postdoc mentor. Your new advisor may have a different working style than your Ph.D. advisor. Therefore, you should focus on building a legitimate relationship between you and your postdoc advisor. You are a vital person in their group; thus, you can help your new mentor in several ways. One of the important things that you can do is write grant proposals. A well-written grant proposal might not only help procure money for the group but will also help you to build your expertise, which would be invaluable in your pursuit of an academic career. Remember someone else once wrote a proposal, which helped you acquire

funding. Now, this is the time for you to help your mentor in writing a proposal, which may help future (unknown) postdocs (or even you, if you decide not to leave the group).

4. Learn from students. Every student has some skills that you can learn from. Be it discovering or formulating new problems, solving problems, developing algorithms, proving algorithms, or implementing algorithms. There is always an area for you to learn and grow. Since you will be working with multiple students, you should use this as an opportunity to learn and enrich your knowledge.

5. Friendship. This might be the most important point to remember. When we work hard, we need to have fun just as hard. However, balance is necessary. Thus, having a mutually

2018 Facebook's Indian subsidiary saw a revenue jump of 53%.

respectful and equitable friendship is always healthy for you and all in the group. Remember professional goals and your duties are equally (or more) important as your personal goals.

DON'TS

1. Do not end up becoming a language editor. Postdocs may wish to enhance their CVs by publishing many papers in less time, and it may also be possible since you work in a group, unlike your Ph.D. where you worked on only your problem. Your Ph.D. studies would have trained you to be good at technical writing. As a postdoc, you may get the opportunity to work on papers where your contribution is limited to editing and/or improving the aesthetics of the paper. Try to limit your input with such papers. As a postdoc you should focus on working on real problems like developing algorithms, proofs, and/or implementation.

2. Do not diminish progress. Often, a postdoc is responsible for producing deliverables during a collaborative project with the postdoc's mentor and Ph.D. students. This may lead to the postdoc to interact a lot with the Ph.D. students. However, a postdoc should not let the time spent on these interactions diminish their own work, since it may impact the entire project.

3. Do not limit your work. A postdoc may need to assign and inspect the work progress, which may lead to having several meetings in a month. However, a postdoc is not a manager, and hence, the postdoc may not be happy doing such management work. Engaging in only such work may degrade your work quality and the things you learned during your Ph.D.

4. Do not affect your mentor's collaborations. A postdoc may work with several of their mentor's collaborators. Of course, building strong relationships with several researchers/professors/students is a necessity. However, it should not come at the expense of harming any ongoing/future collaborations for your postdoc mentor. Remember having a strong relationship with your mentors is a perpetual panacea.

5. Do not make wrong claims. Fingers on a hand are not identical; so how can we imagine all students are equally bright and have identical goals? It may happen that the problem a student is trying to work through can be solved faster by the postdoc. Should you demotivate the student, and then, improve the work? Of course, not; unless your only concern is to promote your name in the author list of a publication. Rather, you should work with the student very closely. Eventually, the student may learn something from you, which may be one of the most satisfying moments of the postdoc experience.

Note. It is important to note all the discussed points are the opinion of the author. None of the points are associated (and can be associated) with industry, a university, project managers, professors, postdocs, or Ph.D./M.S./B.S. students.

Biography

Shantanu Sharma received his Ph.D. in computer science in 2016 from Ben-Gurion University, Israel, and Master of Technology [M.Tech.] degree in computer science from National Institute of Technology, Kurukshetra, India, in 2011. He was awarded a gold medal for the first position in his M.Tech. degree. His research interests include database security and privacy, designing models for MapReduce computations, distributed algorithms, mobile computing, and wireless communication.

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