Aug 16, 2016, 02:04pm EDT

How To Get The Most Out Of Your Tech Internship



Follow

1 This article is more than 5 years old.



(Photo by Sean Gallup/Getty Images)

What are some tips for succeeding as a software engineering intern? originally appeared on Quora: the knowledge sharing network where

compelling questions are answered by people with unique insights.

Answer by Veni Johanna, engineer, intern mentor, on Quora:

The most important high-level tip is to think of yourself as a new full-time employee. The more you think of yourself as an intern, the less expectations you put on yourself, and the less that you will push yourself. In a similar vein, try to compare yourself to the full-timers on your team, rather than the interns. Are you as productive as them? Are you contributing to the team as much as they do? One of the best outcomes of your internship is for full-timers to say "I'm surprised that you are leaving - I thought you were a full-timer!"

At the same time, you should also be mindful and aware of your own experience and skills. If this is your first/second internship in the Valley, you probably have the least experience compared to other people on your team (including the new full-time employees). Since your goal is for them to see you as a full-time employee (see above), be OK with working harder than other people around you, especially in your first couple of weeks. Don't be easily satisfied. Depending on where you are interning, people might have low expectation of you. See this as an opportunity to blow those expectations out of the water.

Be very aware of yourself and your capabilities, before you start and during your internship. What is your goal in this internship, do you want to explore breadth, or go for depth? What are your strengths and weaknesses, and what do you want to improve? Any particular awesome person in the company you want to get to know? During your internship, do you find yourself not gelling with the company? Are you feeling unproductive? Understanding yourself very well is key to getting the most

out of your internship. It allows you to help your mentor set you up for success, and make corrective actions when necessary.

Be proactive. If there's anything you want to learn/know/do, ask for it. There's no harm in asking! I've seen interns do on-call duties, shadow their mentors during interviews, help on projects on other teams, present papers they wrote in school to other full time employees, and help with recruiting at their universities. There are more things to being a full-time engineer than just coding. Interning is the best opportunity you have to learn about a company, so the more parts of a full-time role you can see, the better for you.

Be a full, contributing member of the team, as much as you can.

This means being proactive in team meetings, surfacing good ideas, giving feedback on others' ideas. Offer to share the full-timers' loads, offer to help do code reviews, offer to share on-call duties. This also will give you a fuller idea of what being a full-timer in a company is like.

Be flexible. It's OK to have your preferences, but be aware of what the team needs and ask your mentor what is the best thing you can do for the team. The best interns aren't divas who just want to work on the sexiest projects, they roll up their sleeves and work on whatever the team needs.

Learn from people on your team. Come to tech talks, chat with people to understand what they are working on, ask people (not necessarily your mentor) for feedback on your project. I found it useful to 'stalk' code pushes from the best people at my team/company. Doing that can give you great awareness on the level of productivity that you're striving for, as well as learning good design and coding styles.

Be aware of learning opportunities around you (and many of them are non-technical)! Don't work in a vacuum, open your eyes and ears to things happening in your company. Here are some things that you can effectively learn at an internship that might be difficult to learn in school:

- How does your team make technical tradeoffs? How do they prioritize? Why do they do X instead of Y?
- How does project planning work in your company?
- How are product decisions made? How does a product idea go from idea stage to roll out stage?
- What are things to consider in rolling out a product?
- How does cross-team project management and communication happen?
- How does the company roll out new strategy? Why do they change hiring plans?
- How are decisions being communicated in the company?
- How does your mentor communicate with the PM, designer, or non-technical contributors on your team?
- How does your mentor manage his / her time?

TECHNICAL WORK TIPS

Invest in code quality. In many companies, this is a non-trivial part of debrief conversations to decide whether interns get return offers. You are

not in school. Write industry-quality code and don't write crappy code, even though it works. Force yourself to read and reread your code, and continually make it cleaner. You can do this in many ways:

- Decompose your code
- Write meaningful variable names and comment clearly
- Always write unit tests, and think of other ways you can test your code
- If your company has a code quality guideline, read them before committing any code

Invest time to learn/implement things that make you faster and more productive. Trust me, it's worth the time investment to force yourself to learn these things. As an intern, you have a long career ahead of you, and the one hour you spent reducing the one minute-per-codepush you spent on fixing lint errors will pay off very, very quickly. These things include:

- Setting up your vim/emacs/unix/etc. to improve the common workflows in the company.
- Learning common UNIX commands and being super comfortable using them.
- Being comfortable manipulating things in git/other version control
 of your choice. When you find yourself trying to cheat/take the
 hacky way, force yourself to learn how to do it the right way.
- Setting up and being fluent in Gmail filters or keyboard shortcuts.

• Getting to know who your coworkers think is the most efficient engineer in your company, and asking them for tips.

Commit early, commit often. Don't have giant commits. If it takes some time to split your work into multiple smaller commits, it's almost always worth it. Those smaller commits will be easier to review, easier to revert if something goes wrong, and easier to read. Your mentor and anyone you work with in the future will thank you for being considerate of their time. From your point of view, you'll get those reviews faster and you'll get unblocked faster!

RELATIONSHIPS

Get to know full-timers in your company. Put yourself in situations where you can interact with them and get to know them in meaningful ways. Some ways you can do this:

- Sit with different people at lunchtime.
- Participate in networking programs in your company for example, Quora has an internal program where people randomly get matched with other people in the company for a 1:1 lunch.
- Find opportunities to send your code reviews to different people on your team the more full timers who know you and know your work, the more people can vouch for you for a return offer and the more diverse opinions and experiences you can learn from.
- If there's a hackathon, try to work with someone who's not on your team. There are pro and cons to working with a team of only interns vs. working with full-timers, so be aware of those. Working

with a team of interns give you more opportunities to drive and lead a project, but working with full timers allows you to learn from their experience and gives you more people to vouch for your work.

- Schedule 1:1 lunch with people you want to get to know people are usually happy to talk to interns!
- Ask your mentor to introduce you to folks you are interested in meeting.
- Make use of office hours to get to know executives ask questions about the company, or get career advice from them.

Hang out, spend time with, and get to know your fellow interns.

- This allows you to learn more about other schools, other companies (where they have interned in the past or where they are currently interning), other parts of the company (different teams, functions, etc).
- They will, in a few years, be in many different Silicon Valley companies or start their own companies. If you get to know them well, it will be easy to get referrals to other companies in the future if you need them.
- They are likely awesome, bright students who you can learn a lot from!

For most Silicon Valley companies, there are many intern events inside and outside of the company (e.g. open houses at other companies). Go when possible.

WITH YOUR MENTOR

From early on in your internship, develop a shared understanding and have open and direct communication with your mentor.

- What is their expectation of your pace or outcome of your project?
- What is their preferred way of getting or answering questions, is it through Slack, email, or tap on the shoulder?
- Are they a direct communicator or feedback giver?
- What are their strengths and weaknesses? Understanding this will
 make you aware of the breadth of things that you can learn from
 your mentor.
- In your first couple of 1:1s, you and your mentor should ideally talk about:
 - What is the goal of your internship? Do you want to explore breadth, or do you want to dig deeper into a specific area?
 What do you want to improve, technically and nontechnically?
 - What did you like about your previous internship? What did you not like? What do you want more of, and what don't you want more of?
 - What are your interests? What are the classes/activities in school that you enjoy? Good mentors will try to give you more opportunities where you can excel and learn, which might not necessarily be in your normal scope.

- What do you want to do after your internship?
- What are your strength/weaknesses? What are you nervous about in this internship?
- Which technologies are you familiar with? Which technologies do you need to learn?

Aggressively ask questions when you are unclear on something, or are blocked on something, especially in the first couple of weeks.

- Do not try to impress your mentor, or others, on your first week by not asking questions. All new hires/interns ask questions, and the number of questions they ask on their first week has no correlation with how successful they are in their internship. It makes no sense for you to be stuck trying to figure something out for a day, if it takes five minutes for your mentor to tell you. You don't know what you don't know in your first couple of weeks, so ask away. It's your mentor's job to help you succeed and ramp up!
- After you know your way around, pick and choose which questions you ask. Try to figure things out yourself, then ask only if you are stuck for a disproportionate amount of time, or if you think you are missing key information.
- Give your mentor context on what you have tried, what you are trying to do, or which parts are you particularly confused about.
 - "I've tried X, Y, and/or Z"
 - "I think I'm supposed to do X but I'm not sure how/I'm not sure how that interacts with Y"

- It was hard for me to ask questions on my first internship (I've heard similar difficulty from some international interns for their first internship in the US) what helped was having a list of template phrases I can use so it's easier to get it out.
 - "Can you clarify about X?"
 - "I'm not following what you're saying about X"
 - "Can you repeat that again?"
- If someone explains something really complicated, try to repeat it back in your own words.
 - "Just to make sure I understand, let me try to repeat what you just said..."
 - "To clarify: ..."

Ask for and learn from people's feedback. Ask for your mentor's feedback periodically (maybe weekly or biweekly), if they are not giving it to you. You only have 10-12 weeks, so you don't want to realize that you're doing something inefficiently/wrong on your fourth week. Sometimes it's useful to tell them to be as direct as they can possibly be with you ('I appreciate and can take direct feedback, so you don't have to sugarcoat your feedback with me') because sometimes mentors want to be careful about being too discouraging to their interns. Actively listen and learn from it. If you're like most people, you'll make a *ton* of mistakes in the beginning — and that's OK! In most companies, the growth trajectory of an intern is more important than the level where they started (the gradient is more important than the y-intercept). Show that you are someone who will learn and wants to improve.

Finally, have fun! This is a great opportunity to meet many awesome people (both full-timers and interns alike), work on impactful things, learn new things, and enjoy many fun intern events. Don't forget to have fun and enjoy your internship.

This question originally appeared on Quora. Ask a question, get a great answer. Learn from experts and access insider knowledge. You can follow Quora on Twitter, Facebook, and Google+. More questions:

- Tech Internships: How much do interns contribute to the growth of a tech company?
- Software Engineering: What are the most complex video games?
- Career Advice: What are a few unique pieces of career advice that nobody ever mentions?



Follow

Quora: the place to gain and share knowledge, empowering people to learn from others and better understand the world.

Reprints & Permissions

ADVERTISEMENT