1. Leadership

“We’ll want to know how you’ve flexed different muscles in different situations in order to mobilize a team. This might be by asserting a leadership role at work or with an organization, or by helping a team succeed when you weren’t officially appointed as the leader.”

Managing without authority

2. Role-Related Knowledge

“We’re looking for people who have a variety of strengths and passions, not just isolated skill sets. We also want to make sure that you have the experience and the background that will set you up for success in your role. For engineering candidates in particular, we’ll be looking to check out your coding skills and technical areas of expertise.”

What you know is what counts

3. How You Think

“We’re less concerned about grades and transcripts and more interested in how you think. We’re likely to ask you some role-related questions that provide insight into how you solve problems. Show us how you would tackle the problem presented—don’t get hung up on nailing the “right” answer.”

Problem-solving skills (e.g., http://www.glassdoor.com/Interview/Google-Interview-Questions-E9079.htm)

4. “Googleyness”

“We want to get a feel for what makes you, well, you. We also want to make sure this is a place you’ll thrive, so we’ll be looking for signs around your comfort with ambiguity, your bias to action and your collaborative nature.”

Working in a loosely structured environment
Actionable Career Advice

- Take courses with great projects
  - Learn new technology (e.g., Hadoop, EC2) and develop new skills (e.g., programming for performance); Beyond book knowledge
- Have great industry internships
  - Exposure to real-world development environments: Test and documentation for stuff you leave behind
- Contribute to open source
  - Read, extend, and contribute to other people’s code
- Build your tech portfolio
  - Write your own code!
  - Get to know and love github and git

Comments from My Facebook Friends

- Rick McGeer, Senior Researcher, HP Labs
  1. Build it for yourself first, or for people around you.
  2. If you’re doing software, study the work of a master craftsman, and pay attention to the lessons he leaves, both small and large.
  3. 90% of Performance Improvement is getting it up and running!
  4. Extensible, extensible, extensible: any system worth having outlasts its original use.
  5. Scope, scope, scope: build things that do a narrow range of things well, avoid doing too much.

Thread on Quora

- Do these things between summers:
  - Focus on course work.
  - Study lot of discrete maths, linear algebra, algorithms & some machine learning
  - Do lot of programming competitions
  - Try to master at least two programming languages, preferably one very low level language like C, one relatively high level language like Python, and get familiar with non-imperative paradigms of programming. More the merrier.
  - Use Linux, and learn to use shell effectively
  - Understand how internet works, learn a few basic web development technologies & using them design your own homepage
  - Stay updated with computer science world - both academia & industry
Thread on Quora

0000 – Buy your own domain name.
0001 – Install an Apache web server and configure it in a non-trivial way, e.g. to serve multiple domains.
0010 – Install WordPress and have your own blog. Write blog posts regularly. Write well. Good writing is a critical skill to master in this profession.
0011 – Run your own web site at home or in a hosting company.
0100 – Write at least one complete LAMP web app, preferably two — one where P=PHP, the other where P=Python.
0101 – Have your own [physical or virtual] server on the cloud.
0110 – Install VMWare or equivalent in order to boot up your laptop with more than one OS.
0111 – Configure your home DSL router so that you serve a web site or other kind of server from your home machine / laptop to your friends.

Thread on Quora

1000 – Use a packet sniffer to learn about the network requests your computer does to your favorite game server.
1001 – Make contributions to an open source project.
1010 – Write an app that uses at least one of the popular Web APIs, like Facebook Connect or one of Google’s.
1011 – Use Google AdSense on your web site, and make money just by virtue of attracting traffic.
1100 – Compile a complicated open source project from scratch, like OpenSim or Matterhorns.
1101 – Read works of literature and, besides enjoying the ride, pay close attention to how the author tells the story and makes use of words. Your programs should be as carefully written as these works of art!
1110 – Get yourself involved in a software project where requirements are bound to change halfway through — that’s about 0.01% of homework projects and about 99.99% of real world projects, so find one of the latter kind. Finish the project with patience and the ability to take criticism in a constructive way.
1111 – Write an application using map-reduce. Run it on Google app-engine or Amazon EC2