This cheat sheet contains common skills and experience you may see in different tech roles. While it doesn’t cover every technology, it should help you qualify candidates for specific positions.

**Software Engineer (Back-End)**

- Java, C, C++ or C#
- Ruby or Sinatra, Python, PHP (Typically more popular with front-end or middle-tier engineers, and often popular among self-taught engineers)
- Node.js
- Database technologies
- Relational variants: SQL, MySQL, Oracle, Postgres
- NoSQL variants: Redis, Cassandra, DynamoDB, MongoDB
- Experience with APIs
- System experience – system administration, Linux, cloud computing services (AWS, Rackspace, OpenStack)

**Software Engineer (Middle-Tier)**

This role should have skills and technology experience similar to Back-End Engineers, perhaps without the database or system experience. It is also possible they have some front-end skills, but overlap with back-end is generally more important.

**Software Engineer (Front-End or Web Developer)**

- HTML, CSS
- Javascript (Including JavaScript frameworks like Ember.js, Angular.js, Backbone, etc.)
- Ruby on Rails, Python or Django, PHP, ASP
- Flash, Actionscript (Used to create Flash animations)
- Photoshop

**Database Administrator (DBA)**

- Ability to craft and optimize SQL queries
- Designing data schemas
- Experience with one or more of the major relational databases: SQL Server, MySQL, Oracle
- Database configuration and administration experience

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DevOps Engineer

- Basic scripting experience in languages such as Python, Perl, Ruby or shell scripting (aka Bash or Unix)
- Potentially other languages as well
- SQL knowledge
- Experience with monitoring tools such as Nagios, Munin, Splunk, Zabbix, etc.
- Experience with one or more cloud service providers, such as AWS, Rackspace, OpenStack, etc.
- Operational best practices for deployments, releases and maintenance

Data Scientist

- Strong statistics knowledge and experience, potentially other advanced math as well
- Ability to construct basic SQL queries
- Some programming experience likely in Python, Matlab, R, Java, Ruby, or others
- Potentially specialized machine learning or data mining skills

System Administrator

- Unix, Linux or Microsoft system administration
- Basic scripting or programming experience (shell scripting, Perl, Python, Ruby, etc.)
- Experience with monitoring tools such as Nagios, Munin, Splunk, Zabbix, etc.
- Operational best practices for releases and maintenance
- Experience with internal IT, such as VPNs, printers, IP-based phones, tech support, etc.
- Experience setting up and backing up servers and databases

Quality Assurance Engineer

- Ability to write test plans and test cases
- Knowledge of best practices for testing (For example, black box testing, white box testing, unit tests, smoke tests, regression tests, etc.)
- Selenium, or other test automation tools

Network Administrator

- Experience setting up networks (corporate networks, data centers, etc.)
- Knowledge of switches, routers, firewalls and other networking hardware
- Likely some overlap with system administrator skills particularly the system administration pieces

Software Engineer in Test

- The skills for a QA engineer
- Some programming experience, and the ability to write automated tests
- Experience with SQL
- Best practices for software deployments, releases

Technical Lead

- Strong technical experience in one of the above roles
- People management knowledge or experience
- Project Management skills