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# Example of Principal Software Engineer Job Description

Our company is growing rapidly and is looking to fill the role of principal software engineer. Please review the list of responsibilities and qualifications. While this is our ideal list, we will consider candidates that do not necessarily have all of the qualifications, but have sufficient experience and talent.

## Responsibilities for principal software engineer

* Explore new technologies related to the computer hardware, software, and architectures and make recommendations for their introduction into the developmental and operational environments
* Assist in transitioning computer hardware and software design solutions to an operational environment
* Work with other engineers and contractors to promote customer and consumer satisfaction, optimize data security, and help ensure optimal user interfaces
* Understand the available architectures and technologies, assess the promising options efficiently
* Work with the automation and performance teams to support testing and production deployments so that the system performs well as we experience rapid growth
* Contribute, shape and improve the way we use and manage infrastructure and our internal processes
* Review and Support our current cloud deployment as needed
* Create software architecture (embedded, O.S., and Application layer) for complex electromechanical devices
* Lead the product development team in the adoption and use of best practices and software design methodologies
* Work with Quality Assurance and Research and Development to maintain an approved internal Quality System that meets the requirements of GMP’s, QSR, ISO 9001, and IEC62304

## Qualifications for principal software engineer

* An understanding of AJAX and other Web 2.0 technologies preferred
* Strong database skills in SQL and NoSQL structures (MySQL is a must and Postgres is desirable)
* Ability to work well independently or with remote teams
* A sense of humor and an appreciation for BBQ
* 8+ years of experience working in a networking and/or distributed systems
* 8+ years of experience in professional software development is a must have