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# Example of Principal Data Scientist Job Description

Our innovative and growing company is looking to fill the role of principal data scientist. We appreciate you taking the time to review the list of qualifications and to apply for the position. If you don’t fill all of the qualifications, you may still be considered depending on your level of experience.

## Responsibilities for principal data scientist

* Act as a thought leader in the international business
* Conduct advanced statistical analysis to determine trends and data relationships
* Key responsibility will be to define new infrastructure to extract, manage, and analyze data in a scalable way
* Retrieve, prepare, and process data via variety of data sources such as social media, news, internal/external documents, emails, financial data, and operational data
* Evaluate all models and provide authorization of design, outcomes, and recommendations on implementation & validation steps
* Create road maps for implementation of data and analytics strategy, including infrastructure design and development of data models
* Establish data policies, standards, organization and enforcement of data governance
* Explain the ‘why & how’ of your data driven recommendations to cross-functional teams
* Be an expert on data (what is available, how it can be leveraged )
* Actively build IP via patent filing, white papers and conference papers

## Qualifications for principal data scientist

* Fundamental understanding of statistics – hypothesis testing (t-test, p-values), confidence intervals, regression, classification, and optimization
* Experience communicating with both technical and business people
* Experience implementing models and analysis tools through the use of high-level modeling languages
* Proficient with SQL and experience with very large-scale data
* Intermediate to Expert level proficiency with statistical probabilistic modeling techniques such as regression, decision trees, neural networks, support vector machines, clustering techniques
* 7 years’ experience in data driven field