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# Example of Quantitative Researcher Job Description

Our company is growing rapidly and is hiring for a quantitative researcher. Thank you in advance for taking a look at the list of responsibilities and qualifications. We look forward to reviewing your resume.

## Responsibilities for quantitative researcher

* Applying tick-level data analysis and real-world trading experimentation to define strategy decision-making
* Development, calibration, prototyping and documentation of machine learning models
* Act as a subject matter expert for machine learning across the organization
* Development, research and implementation of mathematical optimization models
* Mathematical modelling of business processes and their translation into decision support systems
* Identify new opportunities for operations research within the organization
* Work closely with development teams to ensure accurate integration of models into firm platforms
* The primary responsibility is to generate new alpha through quantitative, event-driven signals that reflect inefficiencies in index construction rules and index events
* Work on alpha generation through stock selection, factor modeling, big data, machine learning, portfolio construction, and risk modeling and analysis
* Provide guidance to junior tem members

## Qualifications for quantitative researcher

* Strong programming and database skills including Bloomberg and R, Matlab, SQL, VB, Microsoft Office
* Advanced degree in statistics, economics, behavioral/social science, or a related quantitative field preferred
* Experience coding with Python and querying languages such as SQL preferred
* A minimum of five years of research experience in the quantitative investment field
* Post-graduate degree, most probably a PhD, in Finance, Applied Economics, Math or related quantitative discipline
* The ability to understand the technical underpinnings of complex infrastructure, identify relevant issues, and continue to build out a robust system capable of dealing with the continued growth of the groups product line