The Research Associate (RA) position reports directly to faculty supervisors and administrative manager in the Research Staff Services office. Ideal RA candidates will demonstrate a high level of independence, intellectual curiosity, and the ability to use discretionary judgment.

Under the general direction of two faculty members in the Finance unit, the RA will develop, design, and conduct research projects; synthesize, analyze, and produce original statistical models; conduct background research for scholarly research products; use advanced knowledge of quantitative research methodologies to further research findings; design new databases, surveys and experiments.

Primary duties:

Partner with HBS faculty on topics central to HBS research agenda. Provide advanced subject-area expertise, analysis and interpretation to faculty member. Act with a high degree of autonomy. Provide sound statistical advice and collaborate with faculty to answer a wide-range of questions related to statistical design and analysis.

Develop, design, conduct, analyze, and implement research using advanced knowledge and learning in data science/machine learning.

Develop, synthesize, and provide analysis of data exhibits for academic journal articles, HBS cases and HBS teaching notes. Provide statistical analysis and design for reports and presentations. Independently manage all timelines and deliverables.

Develop and maintain expertise in new research methodologies and techniques. Experience with a wide array of machine learning algorithms and data mining methods (i.e. time series analysis, state space models, adaptive filtering, mixed effect models, hierarchical Bayes, Markov models, decision trees, boosting, random forests, support vector machines) Manage and manipulate data using a variety of packages (i.e. Python, Stata, SPSS, MATLAB, SAS, R, Mathematica).

Create original, thought-provoking, innovative data presentations for domestic and international audiences.

Exercise independent decision making with regard to progression of research project and methodologies. When confronted with research data, be able to make deductions, add insight and draw conclusions to share with faculty. Collaborate in development of new techniques and instruments. Use knowledge of quantitative methods to analyze and interpret experimental results. Work independently with research methodologies to identify gaps in research data and methods. Produce original and innovative academic materials to supplement faculty research and teaching. Make recommendations to faculty based on statistical interpretation and independent research. Analyze, interpret, and evaluate the quality of results.

Represent HBS to outside entities: interacting with prominent individuals (grace under pressure is essential) when collecting company data.

Ensure compliance with department, University and federal regulations. Complete work with only general direction. Be aware of department, School, University policies and potential outside research policies.
In collaboration with faculty members, must be able to take complex research ideas, concepts, and methodologies and apply them to new projects and situations. Must be able to structure assignments and keep faculty member informed as necessary, using own judgment. Will need to be able to identify and articulate valid statistical arguments to researchers/faculty with varying technical level of expertise.

**Basic Qualifications:**

Advanced degree in quantitative field required (such as: Statistics or Mathematics, Economics, Computer Science, or Business). 2-4 years of relevant work experience.

Knowledge of statistical packages such as R, Stata, SPSS, MATLAB, or SAS. Experience with advanced statistical analysis including but not limited to regression modeling, conjoint analysis, factor analysis and cluster analysis.

Proficient programming skills (i.e. Python, Java, C++). Experience with various machine learning techniques and parameters that affect their performance.

Excellent oral and written communication skills, including the ability to present complex findings to non-technical audiences.

**Additional Qualifications:**

Evidence of outstanding academic achievement. Strong skills related to the Microsoft Office Suite are expected. Experience, training and good habits in data management and analysis. Proven ability with data-based problem solving, and innovation. Experience with high-quality data manipulation and analysis required. Proven ability to work independently and creatively. This position requires an individual capable of consistent use of discretion, judgment, and initiative.

The candidate must have extremely high standards in terms of quality of work, attention to detail, strong organization skills, and absolute commitment to task completion. He or she must be able to balance multiple tasks and shifting priorities under tight deadlines at an accelerated pace when necessary. It is helpful if the candidate is familiar with navigating a complex organization, such as Harvard Business School. Diplomatic skills, comfort in interacting with prominent individuals, and grace under pressure are essential.

**Please Note:**

This is a half-time term appointment starting as soon as possible through June 30, 2018 with strong potential for re-appointment.

Half-time roles are benefits-eligible and can be paired to create a full-time position.

All candidates will be expected to submit sample coding to be reviewed by and discussed with an HBS statistician.

HBS is not able to provide visa sponsorship for this position.