Function: Program Management

Family: Enterprise Business Intelligence

Job Title: Senior Principal Data Scientist

**Job Abbreviation:** [To be Completed by Compensation Team]

Hierarchy Group: Professional

Hierarchy Level: Professional 6

**FLSA Status**: [To be completed by Compensation Team]

## **Summary:**

Responsible for leveraging internal and external data to provide insights and information which supports a facts-based decision making process. Recognized as an expert in own area within organization. Provides leadership, mentoring, and guidance. May participate in the development of business strategy. Decisions are far-reaching in terms of setting precedents for the business and technology.

Responsible for leveraging internal and external data to provide insights and information to enable the optimal facts-based decision making process. You will provide leadership and input into strategy, analysis methods, and tool selection. Your work will revolve around understanding complex businesses, large and complex data manipulation, model building, model validation, model implementation and ensuring all model documentation provides full model transparency. Responsible for building and refining predictive and descriptive statistical models to improve insights, enhance data-driven business strategies, and drive improved profitability. You would develop next-generation analytic approaches where current generation approaches are not adequate. Responsible for thoroughly documenting the thinking and the details of models/processes to enable future analysts to pick the work up seamlessly. Has a good understanding of overall business, including financial acumen, ability to convert complex data into insights and action plans, demonstrated in-depth understanding of predictive modeling life cycle and architects projects through implementation.

## **Core Responsibilities:**

- Provides consultative direction for the data science team and the organization as a whole.
   Develop long-term objectives and plans on tactical and strategic issues. Determines resources, technology and course of action to achieve results.
- Leads the identification and adoption of latest technology developments to ensure we maintain an efforts to define new infrastructure to extract, manage, and analyze data in a scalable way, and to make use of this data to improve our customers' efforts to develop best in class risk mitigations, acquisition engines, profitability algorithms, and new product enhancements
- Leads multiple, complex projects, spanning multiple departments within the BlueWhale organization including Marketing, Sales, Customer Operations, Data Engineering, etc).
- OverseeDirect team in researching, designing, simulationing and/or prototyping new algorithmic product features according to business need.
- Forge relationships with other teams; Drive and champion adoption of Data Science initiatives .

- Functions with great autonomy and provides solutions and guidance independently on other
  engineering projects within the functional unit and outside. Provides consultative direction for
  the Data Science team and the organization as a whole. and d Develops long-term objectives
  and plans on tactical and strategic issues. Determines resources, technology and course of
  action to achieve results.
- Lead development and implementation of scalable algorithmic solutions for real-time solutions including, to churn, pricing, conversion, and audience segmentations. Managing challenges associated with investigating and understanding large datasets, and building models based on Big Data solutions.
- Build deep partnerships with business, product management, and technology leaders. Use best practice and knowledge of internal and or external business issues to improve products, services and in solving complex problems.
- Educate other departments on data science methodologies, concepts and algorithmic advancements.
- Lead complex interdepartmental data science programs that designs solutions across one or more technologies.
- Review and evaluate data scientist programs enterprise level to determine appropriate use of algorithm-driven products and solutions.

Leads multiple, complex projects, spanning multiple departments within the organization. Lead a small group of less experienced team members on analytical projects or on cross-functional teams. Frequently serving as team lead on multiple projects, mentor and train junior team members on cutting-edge technology.

- Has the ability to innovate and evaluate at a senior level; drives solutions through other teams; thinks strategically across one or more technologies. Has a demonstrated track record of indepth technical exposure and successful project delivery
- Interprets problems and provide solutions to business problems using data analysis, data mining, optimization tools, and machine learning techniques and statistics (e.g., predictive models, LTV, propensity models).
- Possesses a broad or deep scope of influence; is aware and responsive to higher level business drivers. Able to prioritize across teams and forge relationships with other teams. Drive and champion change; innovatively solve problems; is willing to take risks and contribute innovative ideas
- Runs larger, more complex projects; documents clearly; refines group process, delegates tasks, represents team on a project calls. Use best practice and knowledge of internal and or external business issues to improve products, services or in solving complex problems.
- Shares data with team. Makes themselves replaceable. Does not develop silo views. Is able to communicate/collaborate with internal and external contacts/vendors; understands context of work outside function
- May lead a small group of less experienced team members on analytical projects or on crossfunctional teams. Frequently serves as team lead on multiple projects, mentor and train junior team members on cutting-edge technology.

Education Level: Master's degree required. PhD preferred

**Field of Study**: Quantitative fields such as Economics, Statistics, Mathematics, Decision Science, Operational Research, Computer Science or Engineering.

## **Certifications:**

**Years of Experience**: Generally requires 8-10 years related experience.

## Skills:

- PhD preferred
- Proven record of work on significant and unique issues, where analysis of situation or data requires an evaluation of intangibles. Can look at the big picture and handle multiple projects at one time. Has good listening skills and demonstrates flexibility
- Advanced level proficiency with statistical probabilistic modeling techniques such as regression, decision trees, neural networks, support vector machines, supervised/unsupervised clustering techniques, etc.
- Expert theoretical knowledge of statistical modeling techniques and advanced applied skills in developing statistical targeting models using at least 2 of the following tools; SAS, R, KNIME, SPSS, Python, RapidMiner, KXEN, Bayesia, MATLAB, Statistica, Weka etc.
- Expert working within enterprise data warehouse environments platforms (Teradata, Netezza,
  Oracle, etc.) and working within distributed computing platforms such as Hadoop and
  associated technologies such as SQL, HQL, MapReduce, Spark (MLib, SQL, R Py), Storm, Yarn,
  Kafka, Sqoop and Hive
- Experience working within enterprise data warehouse environments platforms (Teradata, Netezza, Oracle, etc.) and working within distributed computing platforms such as Hadoop and associated technologies such as SQL, HQL, MapReduce, Spark, Storm, Yarn, Kafka, Sqoop and Hive
- Proficient in at least 1 scripting and/or programming language such as Scala, Julia, C#, Python,
   Perl, Java, C++
- Has the ability to innovate and evaluate at a senior level; drives solutions through other teams; thinks strategically across one or more technologies. Has a demonstrated track record of indepth technical exposure and successful project delivery
- Shares data with team. Makes themselves replaceable. Does not develop silo views. Is able to communicate/collaborate with internal and external contacts/vendors; understands context of work outside function
- Possesses a broad or deep scope of influence; is aware and responsive to higher level business drivers. Able to prioritize across teams and forge relationships with other teams. Drive and champion change; innovatively solve problems; is willing to take risks and contribute innovative ideas

**Compliance**: BlueWhale is an EEO/AA/Drug Free Workplace.

**Disclaimer:** The above information has been designed to indicate the general nature and level of work performed by employees in this role. It is not designed to contain or be interpreted as a comprehensive inventory of all duties, responsibilities and qualifications.