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| **Division/Function Hosting Role:** HHDDA – Commercial Analytical Solutions – Data Science | | **Location Option:**  Upper Gwynedd, USA | |
| **Title:**  Data Scientist | | **BPL:**  R2 | **# of Opportunities:** 1 |
| **Potential Managers:** | **Senthil Murugan**  **Radeyah Muhammad** | | |
| **HRBP:** |
| **Prior Experience Needed:** | * Analyze various patient claims, physician level, EMR data sources, outcome research, census-based demographics, competitive intelligence, forecasts, promotions, managed care positions etc. to understand the marketing environments of our brands. | | |
| **Necessary Competencies:** |  | | |
| **Education Minimum Requirement:** | **Education Minimum Requirement:**   * Master of Science (MS) in Data Science, Operations Research, Statistics, Econometrics, Management Science, Psychometrics, Computer Science, Engineering, or closely related field by Summer 2024   **Required Experience and Skills:**   * Strong working Knowledge of Python along with Distributed Computing experiences * Understanding of the Health Care or Pharmaceutical industry and experience in using various 3rd party data sources, such as IMS Exponent and/or Longitudinal Patient Level Data are necessary. * The candidate must also have demonstrated strong client and project management experience, having to manage multiple analytical projects simultaneously and foster collaboration with colleagues. * The candidate must have experience managing cross-functional teams and/or outside service providers to successfully deliver on analyses with multiple contributors and stakeholders. * Superior communication and leadership skills are critical in order to develop, propose and convey technical concepts to business customers. Candidate must have demonstrated skills in developing concise and decision driven presentations that will inform decisions made by Senior Leaders. | | |
| **Job Description *(e.g. Specific Experiences Provided):*** | Technical:   * Analyze various patient claims, physician level, EMR data sources, outcome research, census-based demographics, competitive intelligence, forecasts, promotions, managed care positions etc. to understand the marketing environments of our brands. * Understanding social interactions through graph networks and behaviors through various behavioral modeling techniques such as discrete choice models as well as wide varieties of machine learning models. * Build Python based agent-based models to simulate. Use off-the shelf simulation tools. * Apply distributed computing techniques to scale the simulations across large clusters.   Project Management and Communication:   * Collaborate effectively with multiple functional teams, particularly Sales and Marketing teams, analytical and IT teams. * Collect requirements, develop scope, timelines, and communication plans. Develop various study scenarios in partnership with multiple cross-functional teams. * Effectively communicate the results to end stakeholders (Marketing) and follow through with their implementations. * Highly flexible and adaptable to constantly changing scopes and environments.   **Preferred Experience and Skills:**   * **Two** years of relevant work experience in commercial analytics within pharmaceutical industry or candidate with a PhD in relevant quantitative field. * Experience with SQL, AWS environment, Java, R, SAS, Excel, Dataiku, Sagemaker. * Experience in and/or conceptual understanding of applying various simulation techniques such as Agent Based, System Dynamics, Discrete Event simulations. * Agile development experience. Being comfortable with making informed decisions under ambiguity. * Experience in applying advanced statistical methods, machine learning, Discrete Choice models, linear and non-linear optimization techniques to address business questions. * Experience with one or more of the following advanced techniques are also desirable: Bayesian data analysis, longitudinal analysis of time series cross sectional data, repeated measures modeling, Hierarchical Linear Modeling, data mining techniques, temporal sequence mining, Neural Networks, Deep Learning, Classification and Regression Trees (CART) and/or Discrete Choice Models. | | |
| **Key Learnings and Challenges in Rotations:** |  | | |
| **Comments/Other Considerations** |  | | |