

All Data Science and Engineering (DSE) applicants will be required to answer these customized questions as part of the online application process. The Admissions Committee use the answers to these questions, along with the rest of the information in your application, to determine the readiness of applicants to be successful in the DSE program.

1. What is your programming experience? List the programming languages in which you are fluent. Describe your role in the development of a complex/interesting software project.
2. Describe your experience using SQL systems. Have you designed a database schema? Have you tuned the performance of a database? Have you written queries involving joins/outer-joins, nesting, grouping?
3. Do you have any hands-on experience with parallel and distributed systems? Please describe one of these experiences.
4. Describe your experience using analytical software such as R, Matlab, SPSS, SAS, Stata, Pandas, Weka, et al? Briefly describe one of the projects using that software.
5. What are the more advanced concepts from probability, statistics and machine learning that you have used in your work? (Examples: regression, covariance, decision trees, graphical models, SVD, SVM, P-values....) Briefly describe the context in which you used one of these concepts.
6. Describe the most significant analytical task that you have performed in the course of your job or school work.