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Envision the Future of Data Science
Committee Charge
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As I argued in my letter to the faculty last spring

(https://www.bu.edu/president/envisioning-our-future-boston-university-in-2030/), Boston University has the opportunity to be a university that "seamlessly connects programs and schools," reducing barriers to making Boston University the most integrated university in the United States. We have taken several steps in this direction, promoting faculty hiring across departments and encouraging faculty affiliation with interdisciplinary centers. However, moving Boston University towards being a more integrative institution for research and education, beyond simply working at interdisciplinary interfaces, requires new approaches that capitalize on and enhance strategically important opportunities by focusing on areas with the largest potential gain from such integration. I believe that data science has emerged as one such area.

Developed from the integration of methodologies in statistics and computer science, the mechanics and analytics of data science have emerged as a powerful toolset across the landscape of disciplines including the arts and sciences, engineering, healthcare, management, communications, and other professional domains. Today, data science education and research should not be confined to a single disciplinary home. For Boston University to be a leader we must integrate research and education in data sciences across the breadth of our campus.

I have asked Professor Azer Bestavros, Director of the Hariri Institute, and Daniel Kleinman, Associate Provost for Graduate Affairs, to lead a faculty committee to make recommendations on how to move forward in data sciences. I am writing to ask you to join this group.

What is the goal of the committee? To leverage and build on our existing strengths and on our recent and expected considerable investments in data science — through the Provost's Data Science Initiative as well as through the budding initiatives in various schools and departments — BU must promote appropriate differentiation and avoid needless departmental and college-school duplication and competition. Moreover, to remain at the cutting edge of research, establish ourselves at the forefront of educational offerings, and to be highly visible

nationally and internationally in this fast-evolving field, Boston University may well need to create either new organizational structures or collaborative mechanisms for integration and synergy.

To pursue these objectives, I am asking the Committee on Data Sciences to consider the following charge:

- 1. Ascertain what undergraduate, graduate, and professional educational programs with connections to or relevance for data science at BU currently exist or are under development and consider what kinds of curricular leveraging and integration might be possible and what kinds of new programs should be developed.
- Ascertain what research-related experiential learning programs with connections to or relevance for data science at BU currently exist or are under development and consider how to leverage these programs to differentiate current or future data science educational initiatives, including degree programs and undergraduate majors, by offering apprenticeships and internships.
- 3. Ascertain what organizational structure, befitting the fast-paced evolution of data science and its rapid integration into various disciplines, will serve BU's objectives of optimizing faculty collaboration, catalyzing programmatic integration across our schools and colleges, and projecting a cohesive view of data science research and education to prospective students and faculty as well as to corporate sponsors and funding agencies.