NY CUNY 2020 Challenge Grant Program
CUNY Center for Big Data Analytics and Visualization:
Business, Cultural, and Scientific Analytics in the Age of Massive Datasets
and a Connected City

The City University of New York (CUNY) is a leading catalyst for economic revitalization in New York City and New York State. In 2013, the Governor enacted the CUNY2020 Challenge Grant Program, expanding a statewide strategy of utilizing higher education institutions in economic initiatives. The goal of the CUNY2020 Challenge Grant Program is to incentivize long-term economic development implementation plans, driven by CUNY’s campuses areas of their unique academic strengths.

The College of Staten Island/CUNY (CSI), in collaboration with the Borough of Manhattan Community College (BMCC) and The City College of New York (CCNY), proposes to develop graduate-level certificate programs that leverage the expertise of CUNY faculty, the resources of the CUNY Interdisciplinary High-Performance Computing Center (CUNY IHPCC), the newly created School of Business, and the strategic location of BMCC in downtown Manhattan. This proposal calls for the creation of a CSI Big Data Analytics Certificate (BDAC), offered at BMCC’s downtown Wall Street location. Based on a curriculum developed by CUNY faculty, with input from industry advisors, the CUNY Center for Big Data Business Analytics will meet the growing workforce demand in data intelligence, with an emphasis to recruit students consistent with CUNY and Minority- and Women-owned Business Enterprise program goals (MWBE). Additionally, the Graduate Center offers a master’s-level track in Big Data Visualization as part of its MA in Liberal Studies Program, and the CUNY School for Professional Studies offers an online master’s degree program in Data Analytics.

According to a McKinsey and Company (2011) Report on Big Data, there will be a shortage of between 150,000 to 190,000 analytics professionals in the United States by 2018; business professionals with analytics expertise will be in demand as 1.5 million positions will be available over the same time period. As noted in Jobs for New York’s Future: Report of The City University of New York’s Jobs Task Force (2012), a study based on New York State Department of Labor Occupational Projections, positions related to business analytics and “big data” are expected to increase in number. For example, in the information technology sector, demand for management analysts in the NYC region is estimated to increase by 9% between 2008 and 2018; in finance and accounting sectors, demand for management analysts is anticipated to grow by 9%; and in the media and advertising sector, demand for market research analysts and marketing specialists is anticipated to increase by over 14% between 2008 and 2018. These forecasts pertaining to specific titles represent only some of the anticipated new employment opportunities involving analytics in the New York metropolitan area.

BMCC will also offer intensive, one-/two-day workshops/continuing education courses, and seminars on business analytics and big data analysis. Furthermore, given CSI’s interdisciplinary expertise, computational resources, and accessible datasets, CSI is poised to offer high-quality data science and business analytics programming. Additionally, the proposed CUNY CBDBA will build partnerships with New York businesses and promote hundreds of employment opportunities and economic growth in the New York metropolitan area by providing training, analytical skills, and computational resources essential to the regional demands for analyzing big data and business analytics. In the course of one year, leveraging the University’s resources, the CUNY CBDBA and continuing education courses will begin to increase the ability of hundreds of New Yorkers to compete in the challenging global economy for years to come.