

Charge Proposal on Data Science
Submitted by Senator Yuchung Wang
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Background: Recently, Rutgers' Center for Discrete Mathematics and Theoretical Computer Science (DIMACS) held a special seminar given by a candidate for the Henry Rutgers Data Science Professorship. When President Xi of the People's Republic of China visited the UK, he was showcased to the Data Science Institute at Imperial College, London. Data science is a new discipline combining mathematics, statistics, and computer science. It is well recognized that data scientist will be one of the professions that enjoy the highest future growth. In 2015, the demand for data scientists runs ahead of supply. This is a field similar to computational biology, whose growth and expansion will continue in the future. The applications of data science are driven by big data in business, medicine, biology, social sciences, and policymaking.

Proposal:

1. Does Rutgers University has any immediate plan about data science?
2. Rutgers University should assume the leadership in the developments and education of data science. Therefore, we suggest that an initiative led by President Barchi's office be established to draw a plan for such developments involving all four campuses.

Due to the inter-disciplinary nature of data science, collaborations among different colleges/campuses require coordination, and leadership from such an initiative is needed. In Camden, the Department of Mathematical Sciences and Center for Computational and Integrative Biology are planning an undergraduate major in data science. If intercampus courses of data science can be cross-listed, the curriculum will be richer and more robust, and students from different areas of Rutgers University could take classes and have discussions together. This is a good opportunity to leverage the strength, and foster cooperation among four campuses.