



Data Science Developments at Morehouse

Chuang Peng¹

¹Morehouse College

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Background



- ▶ I'm an algebraist by training
- ▶ 2009-11, studied Bioinformatics at Stanford, sponsored by an NIH grant
- ▶ joined by Joe McCray, E. Archibold, C. Ng, developed three new Bioinformatics courses at Morehouse
- ▶ Courses are: Principles of Bioinformatics, Programing in Bioinformatics, Microarray Analysis
- ▶ Based on the new courses, created Bioinformatics minor at Morehouse in 2012, graduated 30+ students with Bioinformatics

Programs



- ▶ data science not only fundamental to Bioinformatics, but same also true virtually everywhere, science and humanities
- ▶ NSF grant DSX, K. Gosha from Morehouse and B. Marshall from Spelman
- ▶ Two summer data science faculty workshops, 3 from Morehouse year 1, and 7 from Morehouse year 2
- ▶ faculty are from all three divisions from Morehouse, Science, Business and Humanity



Future Developments

- ▶ All faculty participants of the two workshops have developed data science modules to imbed into their selected courses
- ▶ to establish a data science laboratory, a Python hub at Morehouse
- ▶ Another NSF grant, joined with Georgia Tech, Agnes Scott, and Spelman
- ▶ to promote data science pedagogy cross the board
- ▶ summer bootcamp, 2019
- ▶ develop new data science courses: Intro to data science, dataset managements
- ▶ develop data science minor at Morehouse