THE UNIVERSITY
of NORTH CAROLINA
at CHAPEL HILL

Data@Carolina
Workshop 2015

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renci
RESEARCH \ ENGAGEMENT \ INNOVATION

UNC
THE ODUM INSTITUTE

The Genesis of this Workshop

Summer 2014

- The Data Studies Working Group released a survey and a detailed report for all units on campus
- The NIH BD2K proposal submitted
  - Greg Forest (Math), Michael Korosok (Biostat), PIs
  - 14 units involved
- NSF NRT program for Data Enabled Science and Engineering proposal submitted
  - Kevin Jeffay, Tom Carsey, Jay Aikat, & six others PIs
  - CAS, Odum, RENCI, SILS, NC TraCS, Inst. for Environment

The Genesis of this Workshop

Late August 2014

- Dean Matson, Exec. Vice Provost Strauss, and Special Asst. to the Chancellor Judith Cone call a planning meeting to discuss graduate degree program proposals for data studies

- A call for a grass roots proposal to create a "data X" program was made

- Several of us form the "Data@Carolina" working group to develop a response

The Genesis of this Workshop

Spring 2015

- Working group submitted proposal to the Provost asking for resources to launch:
  - Professional Science Masters in Data Science
  - Graduate Certificate in Data Science
  - Data Literacy for all undergraduate students
- Proposal also suggests need for faculty hiring
- Presented proposal to the Council of Deans in May 2015
- Ron Strauss charges group to generate campus-wide grassroots momentum for Data@Carolina

Goals for Today

- Exchange of information about the status of all things data on campus
- Generate discussion toward more campus-wide engagement
- Discuss problems and opportunities in:
  - Graduate education
  - Undergraduate education
  - Research

A Call to Action for Data@Carolina

- The Data Revolution happened – Data won!
- Other universities are responding – we should too
  - <u>Michigan</u> – Michigan Institute for Data Science (MIDAS) (2015)
  - <u>Ohio State</u> – *Undergraduate major in Data Analytics* (2014)
  - <u>Penn State</u> – *Institute for Cyber Science:* Harnessing the Power of Digital Data for Science and Society (2012-13)
  - <u>Georgetown</u> – *School of Public Policy's Massive Data Institute* (2013)
  - <u>University of Washington</u> – *eScience Institute* (2014)
  - <u>UC Berkeley</u> – *Professional Master of Information and Data Science* (MIDS) – offered completely online (2014)

North Carolina Programs

- NCSU Master of Data Analytics program
  - Launched in 2007 with 24 students
  - Now accepts only one-in-eight applicants, for 120 seats annually
  - 100% job placement by graduation, with high salaries
  - Major gift from SAS helped launch this program in 2007

- UNC Charlotte's Data Science Initiative
  - Led by the College of Computing and Informatics and the Belk College of Business
  - PSM & graduate certificate in Data Science and Business Analytics (DSBA)
  - Twenty-eight (28) faculty
  - Designed to accommodate working professionals – majority of classes are offered in the evening, off the main campus

How Could UNC be Different?

- Two themes have guided the Data@Carolina conversations thus far:
  - Every student at Carolina achieving data literacy in their field
  - Leveraging data studies for the public good
- Are these good guiding principles?
- Are there others we should consider?

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Questions to Consider

- What is your vision of a major "data X" initiative for the campus?
  - What could be Carolina's unique brand(s)?
  - What would you be passionate about working together to realize on this campus?
- What would it take for Carolina to become a world leader in data X in your area/arena?
  - We're late to the game but how can we become a leader?

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Short-term Goals

- Share results of today's workshop with the Provost
  - A campus-wide call to major action
- Suggest appointing task forces on:
  - Graduate & undergraduate education
  - Collaborative, data-enabled research
- Resource start-up request for PSM, Graduate Certificate, and undergraduate Data Literacy
- Other short-term goals?

Others are Seizing the Big Data Opportunity

★ $1 – 50 million
★ $50 – 100 million
★ $100+ million

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Agenda for Today

8:00 – 8:20   Breakfast and registration

8:20 – 8:40   Introduction

8:40 – 10:10   Talks (7 mins each) by representatives of
                    various campus units

10:10 – 10:25   Intro – grad education, undergrad education,
                    and research

10:30 – 11:30   Breakout sessions

11:30 – 12:00   Plenary – Report back (10 mins each) from the
                    three breakout groups

12:00 – 1:00   Lunch

Data@Carolina Workshop 2015

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