Big Faculty Meeting

October 24, 2019
Agenda

2. Course schedule 2020
3. Update on IPSDS sustainability efforts
4. Networking opportunity for faculty
5. Instructional support + tools
Report on 2018/2019 activities
Report on 2018/2019 activities

- Admitted 3rd and 4th cohort (17 and 15 participants)
IPSDS (Test) Cohorts 1-4

• 58 Participants (31 f + 27 m)
• 22 countries of residence
• Age: median=31 (min-22; max-61)
• 100% working professionals
• Diverse educational/ professional backgrounds
Cohorts 1-4 (Connect@IPSDS 2016-2019)
Report on 2018/2019 activities

- Admitted 3rd and 4th cohort (17 and 15 participants)

- Events:
  Connect@IPSDS and
  Women in Data Science
Day1: create a community within IPSDS students

Day2: open to audience interested in data science

 Speakers

- Roberto Rigobon (Professor at the MIT Sloan School of Management)
- Mine Cetinkaya-Rundel (Professional Educator at RStudio)
- Hilary Parker (Data Scientist at Stitch Fix)
- Curtiss Cobb (Survey Scientist and Manager, Facebook)
- And many more
WiDS 2018 and 2019
Report on 2018/2019 activities

- Admitted 3rd and 4th cohort (17 and 15 participants)

- Events: Connect@IPSDS and Women in Data Science in 2018 and 2019

- Development of Data Science courses, Project consulting course with real data and clients and Certificate Program
Data Generating Process

Research Question

Data Curation/Storage

Data Analysis

Data Output/Access

- Fundamentals of Survey and Data Science (3 credits/6 ECTS)
- Data Collection Courses (1 credit/2 ECTS each)
- Record Linkage (1 credit/2 ECTS)
- Practical Tools for Sampling and Weighting (3 credits/6 ECTS)
- Applied Sampling I-III (1 credit/2 ECTS each)
- Web Scraping (1 credit/2 ECTS)

- Generalized Linear Models (2 credits/3 ECTS)
- Analysis of Complex Data I-III (1 credit/2 ECTS each)
- Text Analysis I-II (1 credit/2 ECTS each)
- Machine Learning I-III (1 credit/2 ECTS each)

- Introduction to Python and SQL (1 credit/2 ECTS)
- Data Munging I-III (1 credit/2 ECTS each)

- Ethics (1 credit/2 ECTS)
- Visualization I-II (1 credit/2 ECTS each)
- Privacy Law (1 credit/2 ECTS)
- Data Confidentiality and Statistical Disclosure Control (2 credits/4 ECTS)

Total: 75 ECTS (15 ECTS Master thesis/colloquium)

http://survey-data-science.net/
Certificate Program

12-credit online program, required courses + electives, < 2 years

- Certificate in Fundamentals of Survey Methodology
  (Fundamentals, Sampling I, Questionnaire Design + Electives)
- Certificate in Fundamentals of Survey Statistics
  (Fundamentals, Sampling I, Inference from Complex Surveys + Electives)
- Certificate in Fundamentals of Data Science
  (Fundamentals, Intro to Big Data and ML, Intro to Python/SQL, Web Scraping and APIs, Intro to Data Visualization, Privacy Law + Electives)
Report on 2018/2019 activities

- Admitted 3rd and 4th cohort (17 and 15 participants)

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- Lessons learned
Lessons Learned – Students Perspective

- 3 to 5 years to complete the program if working full time
- Workload management is a challenge for many
- Desire for more structure (while loving flexibility)
- On-site events are helpful for networking and learning
- More workplace orientation (more hands-on; project oriented)
Peer-to-Peer-Learning & Networking: Group Work

Onsite and online!
Course schedule 2020
# Courses Spring 2020

<table>
<thead>
<tr>
<th>January</th>
<th>February</th>
<th>March</th>
<th>April</th>
<th>May</th>
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<tbody>
<tr>
<td>642 Project Consulting</td>
<td>732 Practical Inference from Complex Surveys</td>
<td>656 Web Survey Methodology</td>
<td>704 Computer-Based Content Analysis II</td>
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<td>631 Questionnaire Design</td>
<td>726 Multiple Imputation</td>
<td>751 Big Data and Machine Learning</td>
<td>699J Generalized Linear Models</td>
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<td>735 Data Confidentiality and Stat. Disclosure Control</td>
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<td>635 Usability Testing for Survey Research</td>
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<td>699? Sampling II</td>
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<td>752 Data Visualization I</td>
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## Courses Summer 2020

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<thead>
<tr>
<th>June</th>
<th>July</th>
<th>August</th>
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<tr>
<td>699M Review of Statistical Concepts</td>
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<td>699? Modern Workflows in Data Science</td>
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<tr>
<td>702 Analysis of Complex Sample Survey Data</td>
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<td>736 Web Scraping and API</td>
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<tr>
<td>699? Machine Learning II</td>
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<tr>
<td>667 Record Linkage</td>
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<tr>
<td>699E Survey Design and Implementation in International Contexts</td>
<td>673 Python/SQL</td>
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# Courses Fall 2020

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<tr>
<th>September</th>
<th>October</th>
<th>November</th>
<th>December</th>
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<tr>
<td>400 Fundamentals of Survey and Data Science</td>
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<tr>
<td>665 Introduction to Real World Data Management</td>
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<td>747 Practical Tools I (for Sampling)</td>
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<td>627 Experimental Design</td>
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<td>730 Measurement Error</td>
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<tr>
<td>626 Sampling I</td>
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<tr>
<td>673 Python/SQL</td>
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<tr>
<td>624 Privacy Law</td>
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<tr>
<td>699 Data Ethics</td>
<td>703 Computer-Based Content Analysis</td>
<td>725 Item Nonresponse and Imputation</td>
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Update on IPSDS sustainability efforts
Update on IPSDS sustainability efforts

Organization

- Mannheim Business School
- Office of Extended Studies Maryland
- International Statistical Institute/Government Agencies/UNECE
- Name of the program

Scaling enrollment

- Single-sign on (extended online short courses)
- Max. #of participants? Reduced video meetings?
Networking opportunity for faculty
Networking opportunity for faculty

- Slack (Raphael Nishimura)
- Dropbox (Carolina Haensch)
- What would you like to see?
Instructional support + tools
Instructional support + tools

- Discussion forums (Florian Keusch)
- Piazza (Raphael Nishimura)
Coordination & Funding

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Thank you for being a part!

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