香港浸會大學
HONG KONG BAPTIST UNIVERSITY

Course Overview

JOUR7280/COMM7780

Big Data Analytics for Media and Communication

Instructor: Dr. Xiaoyi Fu

Contact Information

- Lecturer
  - Dr. Xiaoyi FU (傅晓艺)
    - Email: xiaoyifu@hkbu.edu.hk
    - Consultation hours: by appointment
- Teaching assistant
  - Mr. Shijun Ni
    - Email: 20481578@life.hkbu.edu.hk
- Time: Thu 9:30-12:20 CVA703

Who am I

Xiaoyi Fu, PhD

IT Professional – Computer Science Researcher

- Lecturer
  - Department of Journalism- Hong Kong Baptist University

新聞系
DEPARTMENT OF JOURNALISM

香港浸會大學
HONG KONG BAPTIST UNIVERSITY

- Background
  - Bachelor of Engineering in Computer Science & Technology, Zhejiang University
  - PhD in Computer Science, HKBU

What do you expect from the course?

- Scan QR Code or visit https://docs.qq.com/doc/DTkZNbXpMbEVJUkpI

Is this course hard?

- This course (may/might/probably/possibly) be hard

Is this course easy?

- This course (may/might/probably/possibly) be easy

Is this course happy?

- You will learn a lot of new and useful things
  - This course is informative and helpful!

What is this course about?

- EDAV
  - Exploratory
  - Data
  - Analysis
  - Visualization

- Which Kind of Data?
  - Numerical
  - Text
  - Images
  - Sound

Course Objectives

- Course aims
  - Describe fundamentals of Python programming
  - Explain concepts of computational thinking
  - Describe and explain concepts of data analysis packages
  - Use Python to execute data analysis packages
  - Conduct data analysis and design visualization to present analysis results

Course Overview

- Module 1: Data science fundamentals and Python programming
- Module 2: Data collection and (pre-)processing
- Module 3: Data exploration and visualization

Course Information & Topics

- (Tentative) Course Schedule
  - Module 1 (Week 1-6):
    - Media and communication in the digital age
    - Data science projects pipeline
    - Python in action
  - Module 2 (Week 7-9):
    - Data scraping
    - Data (pre-)processing
  - Module 3 (week 10-12):
    - Data exploration and visualization

Assessment Components

Type of Assessment	Weighting	Description of Assessment Tasks
Class participation & tutorial tasks	15%	Students will be introduced in lectures and guided readings to the key concepts and methods on data acquisition and processing in the digital age.
Individual exercises	25%	Students develop and test customized algorithms individually to collect and process social media data.
Group project and presentation	60%	Students work in teams to collect, process, and analyze social media data and present their findings in data product and an oral presentation.

Assessment

- Class participation and tutorial tasks (15%)
- Students are expected to participate in the lecture sessions, tutorial exercise, and project-based consultation meetings punctually and actively.

Assessment

- Individual assignment(25%)
  - 1 automated online data acquisition challenge (12.5%)
  - 1 exploratory data visualization assignment (12.5%)
    - 400– 600 words in English;
    - defining the problems
    - identifying the (online) data sources
    - presenting the codes and analytical process step by step
    - briefly reporting the results

Assessment

- **Group Project** (60%): Presentation (30%) and report (30%)
  - 3 - 4 students per group;
  - Develop a data-driven investigation and storytelling project based on public datasets;
  - Present the research questions, methods and approaches, and findings;
  - In-class presentation, 10 - 12 minutes
    1. Appropriateness of materials;
    2. Proper application of data science skills;
    3. Organization – clear and logical flow, coherent and cohesive;
    4. Delivery – clear and focused presentation;

Assessment

- **Group Project** (60%): Presentation (30%) and report (30%)
  - Written report
    1. No more than 1000 words in English (excluding references, codes, and appendix)
    2. Focusing on questions, and data analytical steps (the pipelines)
    3. Interpreting the results

Assessment

- Workload distribution declaration for Group Project
  - NO “free rider” please.
  - You can discuss, negotiate and allocate the workload on your own within your team.
  - A **declaration form** will be submitted with your final project report.
  - During the in-class presentation, a table clearly show the **labor distribution** is required.

Group Members	Data collecting	Data visualization	Report writing	PPT	Interview and Video	Presentation
CHEN Xi	✓		✓			✓
LAN Yani	✓			✓	✓	✓
CHEN Weishan	✓		✓			
SHEN Tianxiao	✓					
WANG Yang	✓	✓	✓		✓	✓

Assessment

- Plagiarism
  - Pay attention to the University's academic regulations rules and guidance notes regarding plagiarism
  - The University may take disciplinary actions against students when there is evidence of collusion between individuals.
  - The work of others which is included in the assignment must be attributed to its source
    - sources citations
    - bibliography referencing
  - Failure to observe such requirements may lead to serious consequences for your study in this course and your registration at the University.

Class Rules

- In-class rules.
  - “Silence is golden” - as long as you keep quiet…
  - Eating and drinking?
  - You are requested to bring your own laptop
  - Medium of instruction?
  - Dress code?

Thank You