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COM5507 Social Media Data Acquisition and Processing

Week 1a. Introduction to the Course

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Agenda

- Who am I?
- What is this course about?
- What is the assessment method?

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- ▶ <https://scholar.google.com/citations?user=iOFelDIAAAAJ&hl=en>
- ▶ [@xin_zhi_zhang](#)
- ▶ <https://github.com/xzzhang2>

▶ **Current Position**

- ▶ **Research Assistant Professor**, Department of Journalism, Hong Kong Baptist University
- ▶ **Programme Director**, the Data and Media Communication Concentration (DMC)

► Professional Experience

- **Research Assistant Professor**, Department of Journalism,
Hong Kong Baptist University (2016 – Present)
- **Lecturer**, School of Professional Education & Executive Development,
The Hong Kong Polytechnic University (2014 – 16)
- **Postdoctoral Fellow**, Department of Media and Communication,
City University of Hong Kong (2013 – 14)



► Education

- **Ph.D.** in Media and Communication,
City University of Hong Kong (2009 – 13)
- **M.A.** with *Distinction*, in Communication and New Media,
City University of Hong Kong (2008 – 09)
- **B.A.** in Broadcasting Journalism,
Guangzhou University, China (2004 – 08)



My research areas

- Emerging information and communication technologies and social change
- Comparative political communication
- Digital humanities and digital popular culture
- Data-driven journalism and data visualization
- Computational methods and digital media
- ...

My teaching

- *Multimedia Communication*

Humanities
Contexts and Cases

- *Films and Storytelling*
- *Culture & Ways of Life*
- *Contemporary China*

Practical

- *Issues & Cases in Mass Communication*
- *Languages, Cultures, and Communication*

Theoretical

- *Data-driven Journalism Workshop*

- *Social Media Data Acquisition and Processing (with Python)*

- *Research project supervision*
- *Global Communication*
- *Communication Theory*

Social Sciences
Theories & Patterns

Is this course easy?

Is this course happy?

Am I getting lost?

This course works on different types of (online)
data – and fetch them

This course works on different types of (online)
data – and process them

This course (may) be hard...

This course is interdisciplinary

<http://chasingdeer.co.uk/analyst-venn-diagram.html>

<https://www.r-bloggers.com/data-science-in-businesscomputational-social-science-in-academia/>

<https://knightlab.northwestern.edu/2013/06/28/want-to-build-a-data-journalism-team-youll-need-these-three-people/>

This course is informative and helpful!

Course Overview

- Unit 1: Data science fundamentals and preliminary Python programming (week 1 – 3)
- Unit 2: Automated web data collection (week 4 – 7)
- Unit 3: Data (pre-)processing and data management (week 8 – 9)
- Unit 4: Data exploration (week 10 – 11)

Assessment Components

Type of Assessment	Weighting	CILOs to be addressed	Description of Assessment Tasks
Class participation and tutorial tasks	30%	1, 3, 4	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	40%	2, 3, 5	Students develop and test customized algorithms individually to collect and process social media data.
Group project and presentation	30%	1, 2, 4, 5	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 (30%)**
- Attendance will be taken each week and there will be regular “attendance checkpoints.” “
- Attendance check points” will be announced every 3 weeks (from week 2 – week 13). Full-attendance in each of the check point will be **awarded** 1 mark in their final course evaluation;
- (Ir-)regular small quiz and bonuses.
- Students are expected to participate in the lecture sessions, tutorial exercise, and project-based consultation meetings punctually and actively.

Assessment

- **Individual Exercises (40%)**
 - 1 automated online data acquisition challenge (20%)
 - 1 automated data processing (data cleaning) challenge (20%)
 - for each assignment:
 - 500– 800 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 (30%): Presentation (15%) and report (15%)**
 - 3 - 4 students per group;
 - Develop a data-driven investigation and storytelling project based on first-hand automated web data collection and present the research questions, methods and approaches, and findings;
 - Each group, with all the members, should meet and discuss the project with the instructor at least twice throughout the semester;
 - In-class presentation, 12 - 15 minutes;
 1. appropriateness of materials;
 2. proper application of data science skills;
 3. organization – clear and logical flow, coherent and cohesive;
 4. delivery – use of high concepts, clear and focused presentation;
 - Written reports
 1. A4 pages 12 – 15 pages 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.

Weekly Schedule

- Teaching Plan.

Class Rules

- 1. On Class-Participation
 - No attendance requirement, but the participation is counted into the final assessment.
 - The sign-up sheet
 - The regular participation
 - Please be punctual

Class Rules

- 2. In-class rules.
 - “**Silence is golden**” - as long as you keep quite...
 - Eating and drinking?
 - You may bring your own laptop
 - Medium of instruction?