Lecture 0
Introduction to DTS204TC

DTS204TC Data Visualisation

Xi'an Jiaotong-Liverpool University
西交利物浦大学

Yuxuan Zhao

Key Module Info

Module name	Data Visualisation
Module code	DTS204TC
Credit value	2.5
Semester in which the module is taught	Block 2 of Semester 2, 2023 - 24
Pre-requisites needed for the module	None

Module Leader

- Yuxuan Zhao is a lecturer at School of AI and Advanced Computing (AIAC). I obtained my PhD from UoL and MSc from UCL. My research interests include Deep Learning, Computer Vision, Computer Graphics and Image & Video Processing etc.
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- Office: D-5008 TC Campus
- Office Hour: 3pm – 5pm Tuesday (TC Campus) & 1pm – 3pm Friday (SIP Campus) by appointment

Co-teacher

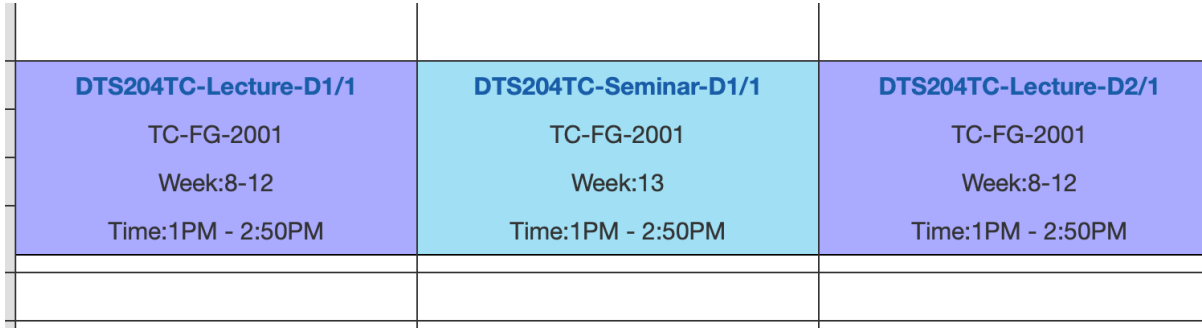
- Zhen Hua received her bachelor's and master's degrees in control science and engineering from the Harbin Institute of Technology, followed by a Ph.D. in system engineering co-trained by the China Academy of Aerospace Systems Science and Engineering and the University of Manchester.
- Email: Zhen.Hua@xjtlu.edu.cn
- Office telephone number: 89167600
- Room number and office hours: 1pm – 3pm Tuesday & 1pm – 3pm Thursday by appointment

TA

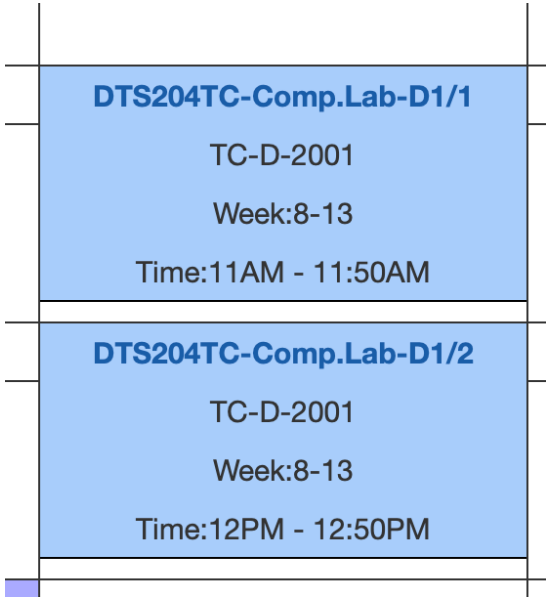
- Tong Chen: tong.chen19@student.xjtlu.edu.cn
- Xinyue Zhang: xinyue.zhang1802@student.xjtu.edu.cn

Delivery Schedule

- Lecture (Week 8 - 12)
  - Lecture D1: Mon. 1pm – 3pm; TC-FG-2001
  - Lecture D2: Tue. 1pm – 3pm; TC-FG-2001



- Lab (Week 8 - 13)
  - Wed. 11am – 12pm / Wed. 12pm – 13pm



- Seminar (Week 13)
  - Mon. 1pm – 3pm TC-FG-2001 (Guest Lecturer)

Module Overview

- Learning Outcomes:
  A. Use data visualisation methods and techniques to analyse a given data set.
  B. Use software tools to analyse a given data set.
  C. Select appropriate analysis and visual encoding methods for a given data type.
  D. Design an effective visualisation to highlight particular features of a given data set.
  E. Critically evaluate the effectiveness of a given data visualisation.
  F. Create visualizations using interactive web graphics programming in JavaScript, and D3.js.
  G. Describe the fundamentals of 2-D and 3-D graphics.

- Programming Language: HTML, JavaScript

Assessment

Sequence	Method	Assessment Type	Learning outcomes assessed	% of Final Mark	Resit(Y/N/S)[3]
001	Project	CW	ALL	100	Y

- Final Assessment
  - 2 Tasks: Task 1 60%, Task 2 40%
  - 100% individual work
  - Deadline: 23:59, May 23rd, 2024 (Week 13, Thursday)
  - Coursework must be submitted electronically through the module webpage on LMO. PLEASE DOULD CHECK YOUR SUBMISSION!!!

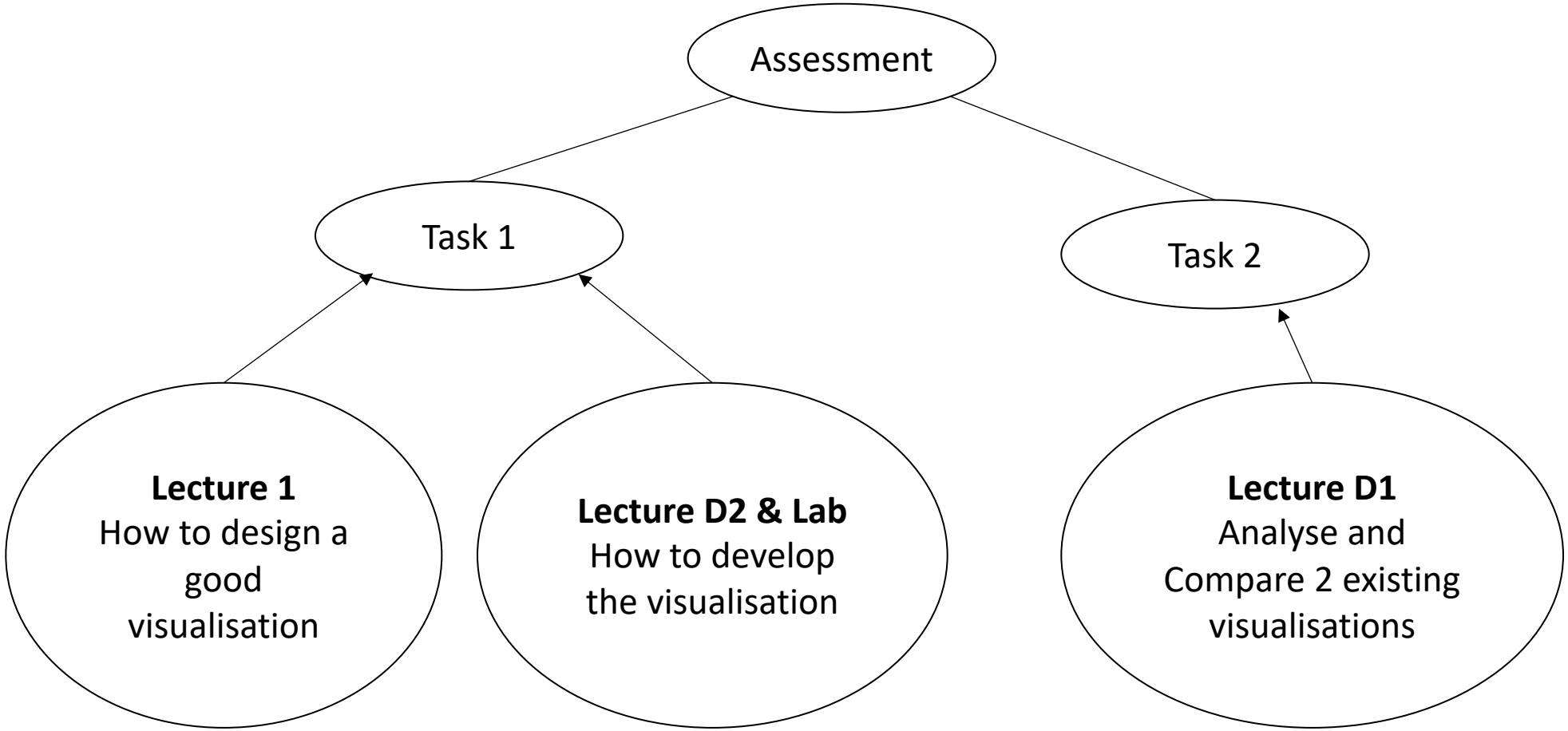
Lecture & Lab Content

- Lecture D1
  - The Fundamental and Theory of Data Visualization
- Lecture D2
  - Data visualization programming content: HTML, JS, D3.js
  - *Don’t worry if you cannot find the relation between Lecture D1 and D2*
- Lab
  - Practice (Mainly based on Lecture D2)

Lecture, Lab and Assessment

- Lecture D1 → *Task 1 & 2*
  - The Fundamentals and Related Concepts of Data Visualization
- Lecture D2 → *Task 1*
  - Data visualization programming content: HTML, JS, D3.js
- Lab → *Task 1*
  - Practice

Lecture, Lab and Assessment



Support Materials

- Quiz (not related to your Grade)
- Feedback Session
- We will have a survey about these materials at the end of the semester.

If you have questions …

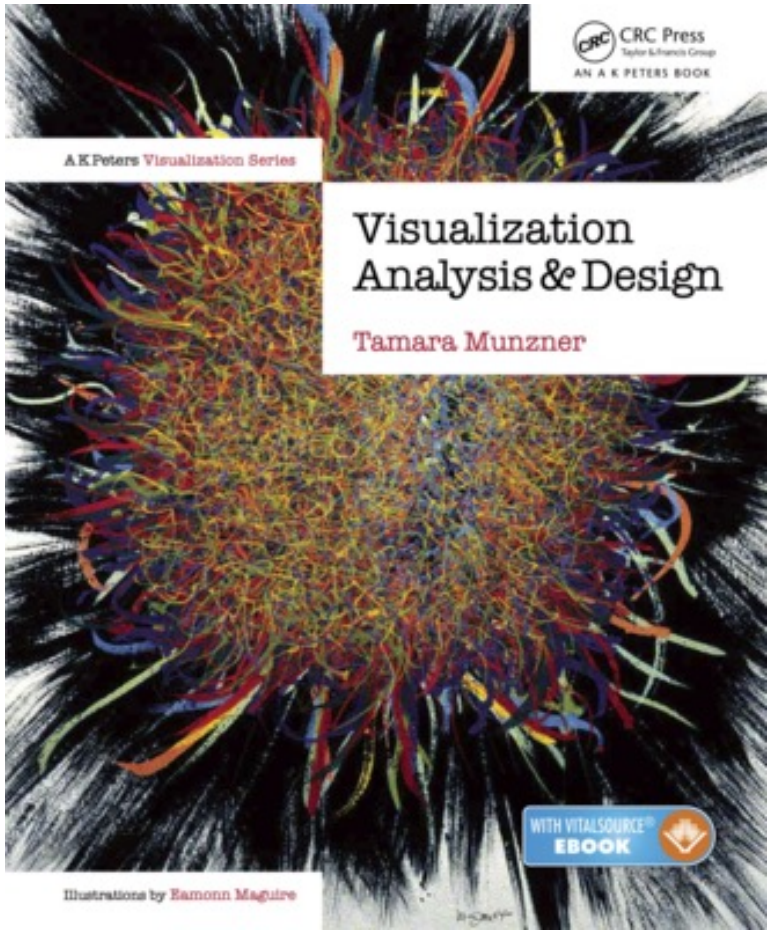
- Q&A
  - Lab
  - Office hour
  - Discussion board (LMO)
  - Seminar
  - Email

If you want to complain …

- Suggestions and Complaints
  - We can make our DTS204TC better together
  - Recommended Way
    - After Class
    - Office Hour
    - Email
    - SSLC
    - MQ
  - Not Recommended Way
    - 纸条
    - WeChat

Textbook

- Tamara Munzner. *Visualization Analysis and Design*. A K Peters Visualization Series, CRC Press, 2014. ISBN: 9781498759717



More Info

- Attendance Rate is very important
- No Exam
- No Group Work
- Late Submission: University Rule