

IEDA3302 - E-Commerce Technology and Applications

2023 Fall Syllabus

Instructor: Ajay Joneja
Office: Room 5598 (lifts 29-30); Email: joneja@ust.hk
Teaching Assistant: TBA
Lectures: Wed, Fri 03:00PM - 04:20PM; Rm 2463
Tutorial: Mon 10:30AM-11:20AM

Description:

A significant portion of modern commercial activity is dependent on electronic commerce. In this course, you will gain familiarity with common e-commerce business models and get an understanding of how and when they are used. We shall cover some important enabling technologies, including basics of internet communication and security. Three important application types will be covered: search, demand forecasting, and customer acquisition. These will be used to introduce you to developing simple programs (using python language) covering important techniques such as graph search, data processing and visualization via dimension reduction, regression, clustering and classification.

The topics will be covered in the following sequence:

1. Foundations: Infrastructure and protocols of the web, sessions, security basics
2. Search: web as a graph, graph search basics, crawling basics
3. Visualization: simple interactive graphical informatics
4. Demand forecasting: Simple regression models, Bass diffusion model
5. Customer acquisition: Clustering, classification; [time permitting: Discrete choice models]

Text and References:

There is no required textbook. Notes (and some additional readings) will be provided for each topic (see the "Files" tab on left panel).

Grading (to be confirmed)

HW: 15%, Exam 1: 30%, Project: 25% (20% for work + 5% for presentation), Exam 2: 30%

Policies: (to be confirmed)

1. All HW's must be done individually; If any part of a HW is confirmed to be copied, then all involved students will receive a zero score on that HW with no further implications.
2. Any form of cheating or other violation of rules during Exam 1 or Exam 2 will result in automatic Fail grade for course.
3. The instructor can allocate up to 3% additional credit (used in computing the final grade) for class participation.
4. Projects will be done in groups of two students; in special cases, single-person or team of three may be allowed depending on agreement with the instructor on work scope, member- task allocation etc.