Seminar

Teacher: Jerry Hsu, 中原大學, 電機資訊學院, 工業與系統工程學系

Email: chhsu135 AT gmail

Email subject: Seminar, your name (郵件主旨:書報討論, 姓名)

- Speakers
- Report due date: Midterm 4/13, Final 6/20
- TA: 趙振宇 (Jeff), email: zz2347605 at gmail dot com
 - o If you have further questions, please ask the TA. (cc (副本) teacher: chhsu135 at Gmail)
 - TA will handle your questions or concerns.
 - TA will discuss this with me if he cannot resolve the issues.
- The original scores of some students are over 100. You are responsible for showing up, asking questions, and submitting your reports on time.
- Thursday: Attendance and participation 20%
- 週三晚 (wed. night)
 - Attendance, that is, show up on time: 10%
 - Ask questions during the talk: 10%
 - Please keep your questions precise and short.
 - Please use the school's MS team (for my class) and login to the account with student_ID@o365st.cycu.edu.tw. Please use a browser-based login instead of the application program to avoid login problems.
 - Please post your question and speaker's answer on CYCU ilearning before each Thursday under "討論區".
- 根據講者內容寫心得報告 (Write a summary based on the speaker's content in Chinese or English):
 - Please choose 12 of 14 talks and submit your summarization in a (Word to) pdf file on CYCU ilearning/Homework (by week).
 - Summarize with 200 words at most: Basic information (the topic), several critical points of the talk, your takeaways, and comments.
 - 翻轉教室 (Flipped classroom): Good and bad examples of summarization.
 - 聽不懂演講時怎麼辦 (What to do if you do not understand the content of a speech?)
 - Weighting and Deadline:
 - 50% for international students and (4 + 1): Friday night (due to the language barrier)
 - 50% for Wednesday night: Thursday night

- If you do not show up in a particular week, your written report will be counted as 0.
- Lifelong learning is key to your career success, so "learning from smart people" is essential. If you want to do your stuff, please sit in the back.
 - Mark Zuckerberg (founder of Facebook), 2005, YouTube
 - "I suggest that you take the hardest courses that you can, because you learn the most when you challenge yourself."
- 期末自由挑選論文導讀, 若作者是學期中的講者可額外加分。(At the end of the semester, you are free to choose <u>any topic in IE</u>. You can get extra points if the author is a speaker during the semester.): 30%
 - Please refer to the format of <u>CIIE 2023 for Chinese or APIEMS2024 for English.</u>
 - o How to find a paper
 - All your cited papers are related to your chosen topic, e.g., AI in the supply chain or ergonomics design experiments.
 - Midterm checkpoint: Around 2 3 pages. Please state the main points of one English paper.
 - Please upload your English paper with your written report.
 - Final report (an extension of your midterm report): Around 5 6 pages.
 - Please cite at least 2 English papers using Google Scholar, one for the midterm and one for the final.
 - Please upload your 2 English papers with your written report.
 - The page number of the cited papers should be larger than ten pages.
 - You could choose the second paper that cites your first paper using <u>Connected Paper</u>.
- o Guides for students: Some tailored to my lab
- o 專題和論文的製作與報告 (tips for the final project and your thesis)
 - D. S. Bernstein, A Student's Guide to Research, *IEEE Control Systems Magazine*, Vol. 19, pp. 102-108, February 1999.
 - o P.R. Kumar, On graduate studies and research, UIUC, 2009.
 - S. Keshav, How to Read a Paper, CS, University of Cambridge. (influential, two pages only)
 - Print it double-sided and read it carefully.
 - Printed? Check its Chinese translation and take note, rest your eyes, and look back and forth.
 - Sharon Zhou, Stanford CS236G GANs (slide, talk)
- Useful tool: Grammarly

- Data science: Domain knowledge + Math/statistics + Software
 - Data Is the New Oil of the Digital Economy.
 - For IE: Process (and quality) as Domain knowledge
- Harvard Business Review, HBR at 100: The Most Influential and Innovative Articles from Harvard Business Review's First Century, June 14, 2022. (30 articles in 100 years) (Chinese)
 - Thomas H. Davenport and D.J. Patil, <u>Data Scientist: The Sexiest Job of the 21st Century</u>, HBR, October 2012.
 - (further information) Thomas H. Davenport and D.J. Patil, <u>Is Data</u>

 <u>Scientist Still the Sexiest Job of the 21st Century?</u>, HBR, July 2022.
 - <u>Erik Brynjolfsson</u> and Andrew McAfee, <u>The Business of Artificial Intelligence</u>, HRB, July 2017.
- Excellent background knowledge in optimization and machine learning:
 - Andrew Ng, How to Build Your Career in AI (free ebook)
 - "AI is the new electricity. It will transform and improve all areas of human life."
 - The Analytics Edge by MIT
 - Required course for <u>Master of Business Analytics</u> (10k US dollars)
 - MIT OCW, YouTube, edX (10–15 hours per week for studying this course)
 - o Free courses at Coursera, edx
- 簡禎富, IC 之音 | 藍湖策略. 數位轉型 (知識含量很高的節目, 眼睛休息的時候, 可以聽一下, 以了解產業現況)
 - o For English podcast
- AI 工具系列, AI 論文工具
- Mayo Clinic example