**The Hong Kong University of Science and Technology**

**MSc Program in Data-Driven Modeling**

**PHYS 6771 Data-Driven Modeling Seminars and Tutorials**

**Seminar Report Form**

**Note:**

1. Each seminar summary: > 100 words.
2. You can attach your notes taken in the seminar with equivalent word limits (handwritten notes are fine), but do not copy from any existing materials.
3. After each seminar, please submit your form to mscddm@ust.hk or the Program Office at Room 4452.

**Section I. Personal Particulars**

|  |  |  |  |
| --- | --- | --- | --- |
| Student’s Name: | ZHANG Mingtao | Student ID: | 20989977 |

**Session II. Seminar Report**

|  |  |  |  |
| --- | --- | --- | --- |
| Date: | 1 December 2023(Friday) | Time: | 3:00 – 4:00 pm HKT |
| Title: | **From Academia to Data Science Industry – A Physicist Perspective** | | |
| Speaker: | Dr. Chris CHAN, Lead Data Scientist, Consultant, and Manager (Specialist Master), Deloitte US | | |
| Summary:  (>100 words) | Many different ways to categorize between Al, DS, ML and more. The differentiation becomes important when defining roles of a job.  AI / DS / ML applications:  Computer vision  Natural language processing  Time series forecast  Pattern recognition  Information retrieval  Automation & optimization  Recommender  Lifecycle of an ML Project:  Scope project  Collect data  Train model  Deploy in production  Generative Al (GenAl) is a new Al trend to learn data patterns and structures and then generate new outputs that are not seen in the training data.  Applicable for different data modalities:  Text (most applications)  Code  lmages  Audios  Videos  3D data  A foundation model is a large neural network model trained on a vast quantity of data that is task agnostic.  A large language model is an example trained from massive amounts of text data and can be further adapted for different downstream tasks.  ChatGPT - Chat Generative Pre-trained Transformer, is a popular LLM (by OpenAl) that allows users to interact in a conservational way. | | |
| The question you/your classmate asked that inspired you the most in the seminar:   1. How do you think of the AI winter? 2. DS Salary?   Speaker's answer to the above question:   1. I don’t think AI will go down, the field has been extended for many years, and this topic is still fancy. People will be keeping working on it in the future. 2. It depends on country and work aspects. | | | |
| Attachments: \_\_\_\_ pages (if any, for example, handwritten summaries) | | | |

**Session III. For the Program Office of MSc in Data-Driven Modeling Use Only**

|  |  |  |  |
| --- | --- | --- | --- |
| Submission Date: |  | | |
| Verified by: |  | Verified date: |  |