

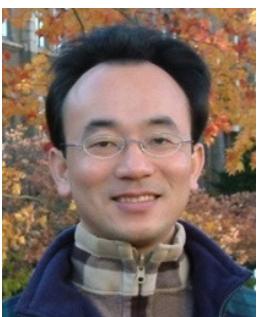
Sharing Teaching Experiences in EMI Courses and Project-based Learning (PBL)

2023/5/22 (Monday) 13:00 - 15:00

Host: Prof. Yu-Chin Liu

Information Management, College of Management, Shih Hsin University (SHU)

2F, No. 111, Muzha Road, Section 1, Wenshan District, Taipei, Taiwan

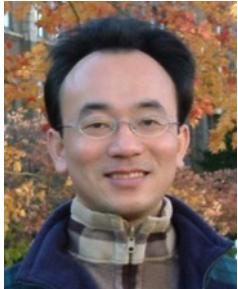


Min-Yuh Day, Ph.D,
Associate Professor

Institute of Information Management, National Taipei University

<https://web.ntpu.edu.tw/~myday>





戴敏育 博士

Min-Yuh Day, Ph.D.

aws academy

Accredited Educator

aws certified

Solutions Architect

Associate

aws certified

Cloud Practitioner

Associate Professor, Information Management, NTPU
Visiting Scholar, IIS, Academia Sinica
Ph.D., Information Management, NTU

Director, Intelligent Financial Innovation Technology, IFIT Lab, IM, NTPU

Associate Director, Fintech and Green Finance Center, NTPU

Publications Co-Chairs, IEEE/ACM International Conference on Advances in Social Networks Analysis and Mining (ASONAM 2013-)

Program Co-Chair, IEEE International Workshop on Empirical Methods for Recognizing Inference in TExt (IEEE EM-RITE 2012-)

Publications Chair, The IEEE International Conference on Information Reuse and Integration for Data Science (IEEE IRI 2007-)



國立臺北大學
National Taipei University





2023 NTPU 永續月 【SDGS永續沙龍】



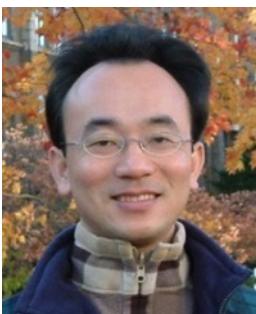
生成式AI在永續發展的應用 Generative AI and ChatGPT for ESG and Sustainable Development

Time: 2023.04.27 (Thu) 12:10-13:30

Place: USR HUB, Office of Sustainability, NTPU

Host: Office of Sustainability, NTPU

<https://forms.gle/vYVvYBT6y1ik4RtN7>



戴敏育 永續辦公室 社會責任組 組長
Min-Yuh Day, Ph.D, Associate Professor

Institute of Information Management, National Taipei University

<https://web.ntpu.edu.tw/~myday>



Outline

- EMI Teacher Community, AACSB, NTPU
- Teaching Experiences Sharing
- EMI Courses
- Project-based Learning (PBL)

EMI Teacher Community II

AACSB, NTPU

2022-2023

EMI Teacher Community Activities

- 1. 2022/05/05 (Thursday) 12:00 pm-13:00 pm, B302
 - **Teaching Experiences Sharing of EMI Courses in AI for Business Applications**
 - **Min-Yuh Day**, National Taipei University,
- 2. 2022/05/11 (Wednesday) 9:10 am - 12:00 pm, Google Meet ONLINE
 - **Agile Principles Patterns and Practices in FinTech and Digital Transformation**
 - **Shihyu (Alex) Chu**, Senior Industry Analyst/Program Manager, Market Intelligence & Consulting Institute (MIC)
- 3. 2022/05/11 (Wednesday) 12:10 pm - 13:00 pm, Google Meet ONLINE
 - **Professional Business Presentations in English**
 - **Shihyu (Alex) Chu**, Senior Industry Analyst/Program Manager, Market Intelligence & Consulting Institute (MIC)
- 4. 2022/05/18 (Wednesday) 12:10 pm - 13:00 pm, Google Meet ONLINE
 - **Web 3: From DeFi to WoFi**
 - **Prof. Shih-wei Liao**, National Taiwan University
- 5. 2022/05/27 (Friday) 12:00 pm - 13:00 pm, Google Meet ONLINE
 - **Experiences Sharing of NTPU EMI Teaching Community II**
 - **Professors of EMI Teaching Community II**, National Taipei University

1

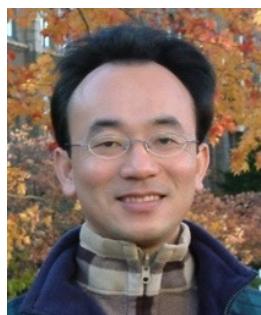
Spring 2022

Teaching Experiences Sharing of EMI Courses in AI for Business Applications

2022/5/5 (Thursday) 12:10 - 13:00
B302, AACSB, National Taipei University



<https://meet.google.com/zuc-yyaw-mnt>



Min-Yuh Day, Ph.D,
Associate Professor

Institute of Information Management, National Taipei University

<https://web.ntpu.edu.tw/~myday>

2

Spring 2022

Agile Principles Patterns and Practices in FinTech and Digital Transformation



Shihyu (Alex) Chu

Senior Industry Analyst/Program Manager
Market Intelligence & Consulting Institute (MIC)



<https://meet.google.com/ish-gzmy-pmo>



9:10 - 12:00, May 11, 2022
(Wednesday)

3

Spring 2022

Professional Business Presentations in English



Shihyu (Alex) Chu

Senior Industry Analyst/Program Manager
Market Intelligence & Consulting Institute (MIC)



<http://meet.google.com/uaq-vmjj-vff>



12:10 - 13:00, May 11, 2022
(Wednesday)

4

Spring 2022

Web 3: From DeFi to WoFi



Prof. Shih-wei Liao
National Taiwan University



<http://meet.google.com/uaq-vmjj-vff>



12:10 - 13:00, May 18, 2022
(Wednesday)



國立臺北大學
National Taipei University

EMI AACSB NTPU



5

Spring 2022

Experiences Sharing of NTPU EMI Teaching Community II

Professors of EMI Teaching Community II
National Taipei University



<http://meet.google.com/uaq-vmjj-vff>

12:00 - 13:00, May 27, 2022
(Friday)



1

Fall 2022

FinTech for Social Good



Dr. Chung-Chi Chen

Researcher,

Artificial Intelligence Research Center,

National Institute of Advanced Industrial Science and Technology,
Japan



<https://meet.google.com/paj-zhhi-mya>



12:10 - 14:00, Oct. 19, 2022
(Wednesday)

2

Fall 2022

Matching Texts with Data for Evidence-based Information Retrieval



Prof. Makoto P. Kato

Faculty of Library, Information and Media Science
University of Tsukuba, Japan



<https://meet.google.com/miy-fbif-max>



9:10 - 12:00, Nov. 23, 2022
(Wednesday)
(Hybrid) B8F40, National Taipei University, Taiwan

3

Fall 2022

The Truth of Crypto & NFT Economy (虛擬貨幣與NFT經濟老實說)



Mu Jou (周書丞)

CTO of Infinitas NFT

GM of Asiania

12:10 - 14:00, Nov. 30, 2022

(Wednesday)

(Hybrid) B3F02, National Taipei University, Taiwan



<https://meet.google.com/paj-zhi-mya>



4

Fall 2022

Index Design – Methodology, Data Analysis and the Application of Quantitative Investing



Jervis J.G. Li
Fund Manager, Yuanta SITC



<https://meet.google.com/paj-zhhj-mya>



9:10 - 12:00, Dec. 6, 2022
(Tuesday)

(Hybrid) B8F40, National Taipei University, Taiwan

1

Spring 2023

Agile Principles Patterns and Practices using AI and ChatGPT



Shihyu (Alex) Chu
Division Director, Software Industry Research
Market Intelligence & Consulting Institute (MIC)

9:10 - 12:00, May 17, 2023
(Wednesday)

(Hybrid) B8F40, National Taipei University, Taiwan



<https://meet.google.com/ish-gzmy-pmo>



2

Spring 2023

國際碳中和產業趨勢與數位轉型永續發展

(International Carbon Neutral Industry Trends and
Digital Transformation for Sustainable Development)



Shihyu (Alex) Chu (朱師右)

Division Director, Software Industry Research
Market Intelligence & Consulting Institute (MIC)

12:10 - 13:00, May 17, 2023

(Wednesday)

(Hybrid) B302, National Taipei University, Taiwan

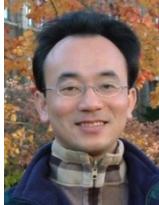


<https://meet.google.com/paj-zhhi-mya>



Teaching Experiences Sharing

Teaching Experiences (EMI)



- Artificial Intelligence for Text Analytics
 - Spring 2022
- Software Engineering
 - Fall 2020, Fall, 2021, Spring 2022, Spring 2023
- Artificial Intelligence in Finance and Quantitative
 - Fall 2021, Fall 2022
- Artificial Intelligence
 - Spring 2021, Fall 2022
- Data Mining
 - Spring 2021
- Big Data Analytics
 - Fall 2020, Spring 2023
- Foundation of Business Cloud Computing
 - Spring 2021, Spring 2022, Spring 2023

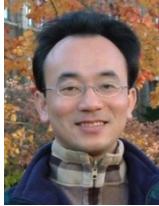


Teaching Experiences (EMI)

- **AI in Finance Big Data Analytics (Fall 2019)**
 - MBA, DBETKU (3 Credits, Elective) [Full English Course] [Distance Learning]
- **Big Data Mining (Fall 2018)**
 - MBA, DBETKU (3 Credits, Required) [Full English Course]
- **Social Media Apps Programming (Fall 2013 - Fall 2018)**
 - MBA, IMTKU (2 Credits, Elective) [Full English Course]
 - Fall 2018, Fall 2017 , Fall 2016 , Fall 2015 , Fall 2014 , Fall 2013

EMI Courses in AI for Business Applications

EMI Courses in AI for Business Applications



- **Big Data Analysis**
 - Spring 2023
- **Software Engineering**
 - Spring 2023, Spring 2022
- **Artificial Intelligence**
 - Fall 2022
- **Artificial Intelligence in Finance and Quantitative Analysis**
 - Fall 2022
- **Artificial Intelligence for Text Analytics**
 - Spring 2022

Big Data Analysis

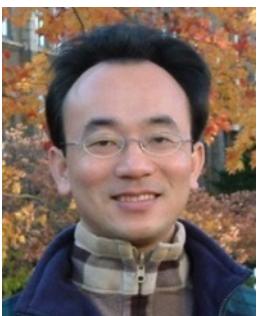
Introduction to Big Data Analysis

1112BDA01

MBA, IM, NTPU (M6031) (Spring 2023)
Tue 2, 3, 4 (9:10-12:00) (B8F40)



[https://meet.google.com/
paj-zhhj-mya](https://meet.google.com/paj-zhhj-mya)



Min-Yuh Day, Ph.D,
Associate Professor

Institute of Information Management, National Taipei University

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Course Syllabus

National Taipei University

Academic Year 111, 2nd Semester (Spring 2023)

- Course Title: **Big Data Analysis**
- Instructor: Min-Yuh Day
- Course Class: MBA, IM, NTPU (3 Credits, Elective)
- Details
 - In-Class and Distance Learning EMI Course (3 Credits, Elective, One Semester) (M6031)
- Time & Place: Tue, 2, 3, 4, (9:10-12:00) (B8F40)
- Google Meet: <https://meet.google.com/paj-zhhj-mya>



<https://meet.google.com/paj-zhhj-mya>



Course Objectives

1. Understand the **fundamental concepts and research issues of Big Data Analysis.**
2. Equip with **Hands-on practices of Big Data Analysis.**
3. Conduct **information systems research in the context of Big Data Analysis.**

Course Outline

- This course introduces the **fundamental concepts, research issues, and hands-on practices of Big Data Analysis.**
- Topics include:
 1. Introduction to Big Data Analysis
 2. AI, Data Science and Big Data Analysis
 3. Foundations of Big Data Analysis in Python
 4. Machine Learning: SAS Viya, Data Preparation and Algorithm Selection
 5. Machine Learning: Decision Trees and Ensembles of Trees
 6. Machine Learning: Neural Networks (NN) and Support Vector Machines (SVM)
 7. Machine Learning: Model Assessment and Deployment
 8. ChatGPT and Large Language Models (LLM) for Big Data Analysis
 9. Deep Learning for Finance Big Data Analysis
 10. Case Study on Big Data Analysis

Syllabus

Week Date Subject/Topics

1 2023/02/21 Introduction to Big Data Analysis

2 2023/02/28 (Day Off)

3 2023/03/07 AI, Data Science and Big Data Analysis

4 2023/03/14 Foundations of Big Data Analysis in Python

5 2023/03/21 Case Study on Big Data Analysis I

6 2023/03/28 Machine Learning: SAS Viya, Data Preparation and Algorithm Selection

Syllabus

Week Date Subject/Topics

7 2023/04/04 (Children's Day) (Day off)

8 2023/04/11 Midterm Project Report

9 2023/04/18 Machine Learning: Decision Trees and Ensembles of Trees

10 2023/04/25 Machine Learning: Neural Networks (NN) and
Support Vector Machines (SVM)

11 2023/05/02 Case Study on Big Data Analysis II

12 2023/05/09 Machine Learning: Model Assessment and Deployment

Syllabus

Week Date Subject/Topics

13 2023/05/16 ChatGPT and Large Language Models (LLM)
for Big Data Analysis

14 2023/05/23 Deep Learning for Finance Big Data Analysis

15 2023/05/30 Final Project Report I

16 2023/06/06 Final Project Report II

17 2023/06/13 Self-learning

18 2023/06/20 Self-learning

Teaching Methods and Activities

- Lecture
- Discussion
- Practicum

Evaluation Methods

- Individual Presentation 60 %
- Group Presentation 10 %
- Case Report 10 %
- Class Participation 10 %
- Assignment 10 %

Software Engineering

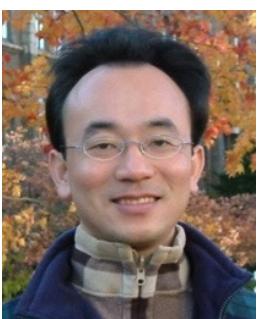
Introduction to Software Engineering

1112SE01

MBA, IM, NTPU (M5010) (Spring 2023)
Wed 2, 3, 4 (9:10-12:00) (B8F40)



<https://meet.google.com/ish-gzmy-pmo>



Min-Yuh Day, Ph.D,
Associate Professor

Institute of Information Management, National Taipei University

<https://web.ntpu.edu.tw/~myday>

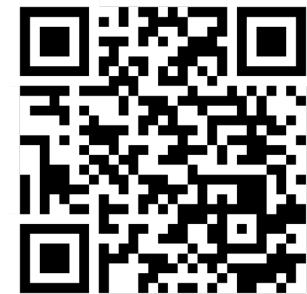


Course Syllabus

National Taipei University

Academic Year 111, 2nd Semester (Spring 2023)

- Course Title: **Software Engineering**
- Instructor: Min-Yuh Day
- Course Class: MBA, IM, NTPU (3 Credits, Elective)
- Details
 - In-Person and Distance Learning EMI Course (3 Credits, Elective, One Semester) (M5010)
- Time & Place: Wed, 2, 3, 4, (9:10-12:00) (B8F40)
- Google Meet: <https://meet.google.com/ish-gzmy-pmo>



<https://meet.google.com/ish-gzmy-pmo>



Course Objectives

1. Understand the **fundamental concepts and research issues** of software engineering.
2. Equip with Hands-on practices of software engineering.
3. Conduct information systems research in the context of software engineering.

Course Outline

- This course introduces the **fundamental concepts, research issues, and hands-on practices of software engineering.**
- Topics include:
 1. Introduction to Software Engineering
 2. Software Products and Project Management: Software product management and prototyping
 3. Agile Software Engineering: Agile methods, Scrum, and Extreme Programming
 4. Features, Scenarios, and Stories
 5. Software Architecture: Architectural design, System decomposition, and Distribution architecture
 6. Cloud-Based Software: Virtualization and containers, Everything as a service, Software as a service
 7. Cloud Computing and Cloud Software Architecture
 8. Microservices Architecture, RESTful services, Service deployment
 9. Security and Privacy; Reliable Programming
 10. Testing: Functional testing, Test automation, Test-driven development, and Code reviews
 11. DevOps and Code Management: Code management and DevOps automation
 12. Case Study on Software Engineering

Syllabus

Week Date Subject/Topics

- 1 2023/02/22 Introduction to Software Engineering
- 2 2023/03/01 Software Products and Project Management:
Software product management and prototyping
- 3 2023/03/08 Agile Software Engineering:
Agile methods, Scrum, and Extreme Programming
- 4 2023/03/15 Features, Scenarios, and Stories
- 5 2023/03/22 Case Study on Software Engineering I
- 6 2023/03/29 Software Architecture: Architectural design,
System decomposition, and Distribution architecture

Syllabus

Week Date Subject/Topics

7 2023/04/05 Tomb-Sweeping Day (Holiday, No Classes)

8 2023/04/12 Midterm Project Report

9 2023/04/19 Cloud-Based Software: Virtualization and containers,
Everything as a service, Software as a service

10 2023/04/26 Cloud Computing and Cloud Software Architecture

11 2023/05/03 Microservices Architecture, RESTful services,
Service deployment

12 2023/05/10 Security and Privacy; Reliable Programming;
Testing: Test-driven development, and Code reviews;
DevOps and Code Management: DevOps automation

Syllabus

Week Date Subject/Topics

- 13 2023/05/17 Industry Practices of Software Engineering
[Agile Principles Patterns and Practices using AI and ChatGPT,
Invited Speaker: Shihyu (Alex) Chu, Division Director,
Software Industry Research Center, Market Intelligence & Consulting Institute (MIC)]
- 14 2023/05/24 Case Study on Software Engineering II
- 15 2023/05/31 Final Project Report I
- 16 2023/06/07 Final Project Report II
- 17 2023/06/14 Self-learning
- 18 2023/06/21 Self-learning

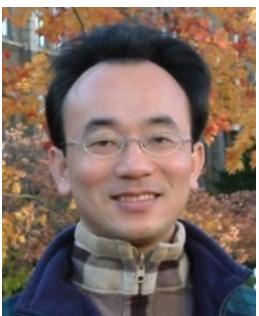
Introduction to Artificial Intelligence in Finance and Quantitative Analysis

1111AIFQA01

MBA, IM, NTPU (M6132) (Fall 2022)
Tue 2, 3, 4 (9:10-12:00) (B8F40)



<https://meet.google.com/paj-zhhj-mya>



Min-Yuh Day, Ph.D,
Associate Professor

Institute of Information Management, National Taipei University

<https://web.ntpu.edu.tw/~myday>



Course Syllabus

National Taipei University

Academic Year 111, 1st Semester (Fall 2022)

- Course Title: **Artificial Intelligence in Finance and Quantitative Analysis**

- Instructor: Min-Yuh Day

- Course Class: MBA, IM, NTPU (3 Credits, Elective)

- Details

- In-Class and Distance Learning EMI Course
(3 Credits, Elective, One Semester) (M6132)

- Time & Place: Tue, 2, 3, 4, (9:10-12:00) (B8F40)

- Google Meet: <https://meet.google.com/paj-zhhj-mya>



<https://meet.google.com/paj-zhhj-mya>



Course Objectives

1. Understand the fundamental concepts and research issues of Artificial Intelligence in Finance and Quantitative Analysis.
2. Equip with Hands-on practices of Artificial Intelligence in Finance and Quantitative Analysis.
3. Conduct information systems research in the context of Artificial Intelligence in Finance and Quantitative Analysis.

Course Outline

- This course introduces the **fundamental concepts, research issues, and hands-on practices of AI in Finance and Quantitative Analysis.**
- Topics include:
 1. Introduction to Artificial Intelligence in Finance and Quantitative Analysis
 2. AI in FinTech: Metaverse, Web3, DeFi, NFT, Financial Services Innovation and Applications
 3. Investing Psychology and Behavioral Finance
 4. Event Studies in Finance
 5. Finance Theory
 6. Data-Driven Finance
 7. Financial Econometrics
 8. AI-First Finance
 9. Deep Learning in Finance
 10. Reinforcement Learning in Finance
 11. Algorithmic Trading, Risk Management, Trading Bot and Event-Based Backtesting
 12. Case Study on AI in Finance and Quantitative Analysis.

Syllabus

Week Date Subject/Topics

- 1 2022/09/13 Introduction to Artificial Intelligence in Finance and Quantitative Analysis
- 2 2022/09/20 AI in FinTech: Metaverse, Web3, DeFi, NFT, Financial Services Innovation and Applications
- 3 2022/09/27 Investing Psychology and Behavioral Finance
- 4 2022/10/04 Event Studies in Finance
- 5 2022/10/11 Case Study on AI in Finance and Quantitative Analysis I
- 6 2022/10/18 Finance Theory

Syllabus

Week Date Subject/Topics

7 2022/10/25 Data-Driven Finance

8 2022/11/01 Midterm Project Report

9 2022/11/08 Financial Econometrics

10 2022/11/15 AI-First Finance

11 2022/11/22 Industry Practices of AI in Finance and Quantitative Analysis

12 2022/11/29 Case Study on AI in Finance and Quantitative Analysis II

Syllabus

Week Date Subject/Topics

- 13 2022/12/06 Deep Learning in Finance;
Reinforcement Learning in Finance
- 14 2022/12/13 Algorithmic Trading; Risk Management;
Trading Bot and Event-Based Backtesting
- 15 2022/12/20 Final Project Report I
- 16 2022/12/27 Final Project Report II
- 17 2023/01/03 Self-learning
- 18 2023/01/10 Self-learning

Artificial Intelligence

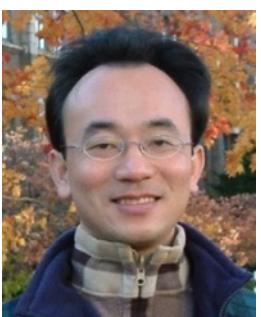
Introduction to Artificial Intelligence

1111AI01

MBA, IM, NTPU (M6132) (Fall 2022)
Wed 2, 3, 4 (9:10-12:00) (B8F40)



<https://meet.google.com/miy-fbif-max>



Min-Yuh Day, Ph.D,
Associate Professor

Institute of Information Management, National Taipei University

<https://web.ntpu.edu.tw/~myday>



Course Syllabus

National Taipei University

Academic Year 111, 1st Semester (Fall 2022)

- Course Title: **Artificial Intelligence**
- Instructor: Min-Yuh Day
- Course Class: MBA, IM, NTPU (3 Credits, Elective)
- Details
 - In-Class and Distance Learning EMI Course (3 Credits, Elective, One Semester) (M6132)
- Time & Place: Wed, 2, 3, 4, (9:10-12:00) (B8F40)
- Google Meet: <https://meet.google.com/miy-fbif-max>



<https://meet.google.com/miy-fbif-max>



Course Objectives

1. Understand the **fundamental concepts and research issues of Artificial Intelligence.**
2. Equip with **Hands-on practices of Artificial Intelligence.**
3. Conduct **information systems research in the context of Artificial Intelligence.**

Course Outline

- This course introduces the **fundamental concepts, research issues, and hands-on practices of Artificial Intelligence**.
- Topics include:
 1. Introduction to Artificial Intelligence
 2. Artificial Intelligence and Intelligent Agents
 3. Problem Solving
 4. Knowledge, Reasoning and Knowledge Representation, Uncertain Knowledge and Reasoning
 5. Machine Learning: Supervised and Unsupervised Learning
 6. The Theory of Learning and Ensemble Learning
 7. Deep Learning, Reinforcement Learning
 8. Deep Learning for Natural Language Processing
 9. Computer Vision and Robotics
 10. Philosophy and Ethics of AI and the Future of AI
 11. Case Study on AI

Syllabus

Week Date Subject/Topics

- 1 2022/09/14 Introduction to Artificial Intelligence**
- 2 2022/09/21 Artificial Intelligence and Intelligent Agents**
- 3 2022/09/28 Problem Solving**
- 4 2022/10/05 Knowledge, Reasoning and Knowledge Representation;
Uncertain Knowledge and Reasoning**
- 5 2022/10/12 Case Study on Artificial Intelligence I**
- 6 2022/10/19 Machine Learning: Supervised and Unsupervised Learning**

Syllabus

Week Date Subject/Topics

- 7 2022/10/26 The Theory of Learning and Ensemble Learning
- 8 2022/11/02 Midterm Project Report
- 9 2022/11/09 Deep Learning and Reinforcement Learning
- 10 2022/11/16 Deep Learning for Natural Language Processing
- 11 2022/11/23 Invited Talk: AI for Information Retrieval
- 12 2022/11/30 Case Study on Artificial Intelligence II

Syllabus

Week Date Subject/Topics

13 2022/12/07 Computer Vision and Robotics

14 2022/12/14 Philosophy and Ethics of AI and the Future of AI

15 2022/12/21 Final Project Report I

16 2022/12/28 Final Project Report II

17 2023/01/04 Self-learning

18 2023/01/11 Self-learning

Introduction to Artificial Intelligence for Text Analytics

1102AITA01

MBA, IM, NTPU (M5026) (Spring 2022)

Tue 2, 3, 4 (9:10-12:00) (B8F40)



[https://meet.google.com/
paj-zhhj-mya](https://meet.google.com/paj-zhhj-mya)



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Associate Professor

Institute of Information Management, National Taipei University

<https://web.ntpu.edu.tw/~myday>

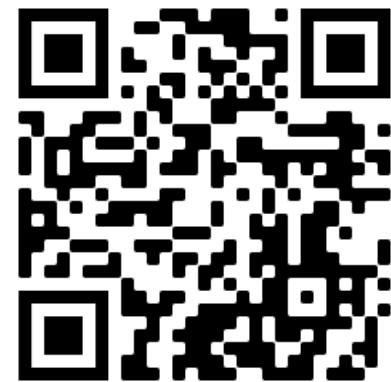


Course Syllabus

National Taipei University

Academic Year 110, 2nd Semester (Spring 2022)

- Course Title: **Artificial Intelligence for Text Analytics**
- Instructor: Min-Yuh Day
- Course Class: MBA, IM, NTPU (3 Credits, Elective)
- Details
 - In-Class and Distance Learning EMI Course (3 Credits, Elective, One Semester) (M5026)
- Time & Place: Tue, 2, 3, 4, (9:10-12:00) (B8F40)
- Google Meet: <https://meet.google.com/paj-zhhj-mya>



<https://meet.google.com/paj-zhhj-mya>



Course Objectives

1. Understand the **fundamental concepts and research issues** of Artificial Intelligence for Text Analytics.
2. Equip with Hands-on practices of Artificial Intelligence for Text Analytics.
3. Conduct information systems research in the context of Artificial Intelligence for Text Analytics.

Course Outline

- This course introduces the **fundamental concepts, research issues, and hands-on practices of Artificial Intelligence for Text Analytics**.
- Topics include:
 1. Introduction to Artificial Intelligence for Text Analytics
 2. Foundations of Text Analytics: Natural Language Processing (NLP)
 3. Python for Natural Language Processing
 4. Natural Language Processing with Transformers
 5. Text Classification and Sentiment Analysis
 6. Multilingual Named Entity Recognition (NER), Text Similarity and Clustering
 7. Text Summarization and Topic Models
 8. Text Generation
 9. Question Answering and Dialogue Systems
 10. Deep Learning, Transfer Learning, Zero-Shot, and Few-Shot Learning for Text Analytics
 11. Case Study on Artificial Intelligence for Text Analytics

Syllabus

Week Date Subject/Topics

- 1 2022/02/22 Introduction to Artificial Intelligence for Text Analytics
- 2 2022/03/01 Foundations of Text Analytics:
Natural Language Processing (NLP)
- 3 2022/03/08 Python for Natural Language Processing
- 4 2022/03/15 Natural Language Processing with Transformers
- 5 2022/03/22 Case Study on Artificial Intelligence for Text Analytics I
- 6 2022/03/29 Text Classification and Sentiment Analysis

Syllabus

Week Date Subject/Topics

7 2022/04/05 Tomb-Sweeping Day (Holiday, No Classes)

8 2022/04/12 Midterm Project Report

9 2022/04/19 Multilingual Named Entity Recognition (NER),
Text Similarity and Clustering

10 2022/04/26 Text Summarization and Topic Models

11 2022/05/03 Text Generation

12 2022/05/10 Case Study on Artificial Intelligence for Text Analytics II

Syllabus

Week Date Subject/Topics

13 2022/05/17 Question Answering and Dialogue Systems

14 2022/05/24 Deep Learning, Transfer Learning,
Zero-Shot, and Few-Shot Learning for Text Analytics

15 2022/05/31 Final Project Report I

16 2022/06/07 Final Project Report II

17 2022/06/14 Self-learning

18 2022/06/21 Self-learning

Project-based Learning (PBL)

PBL

Design Teaching

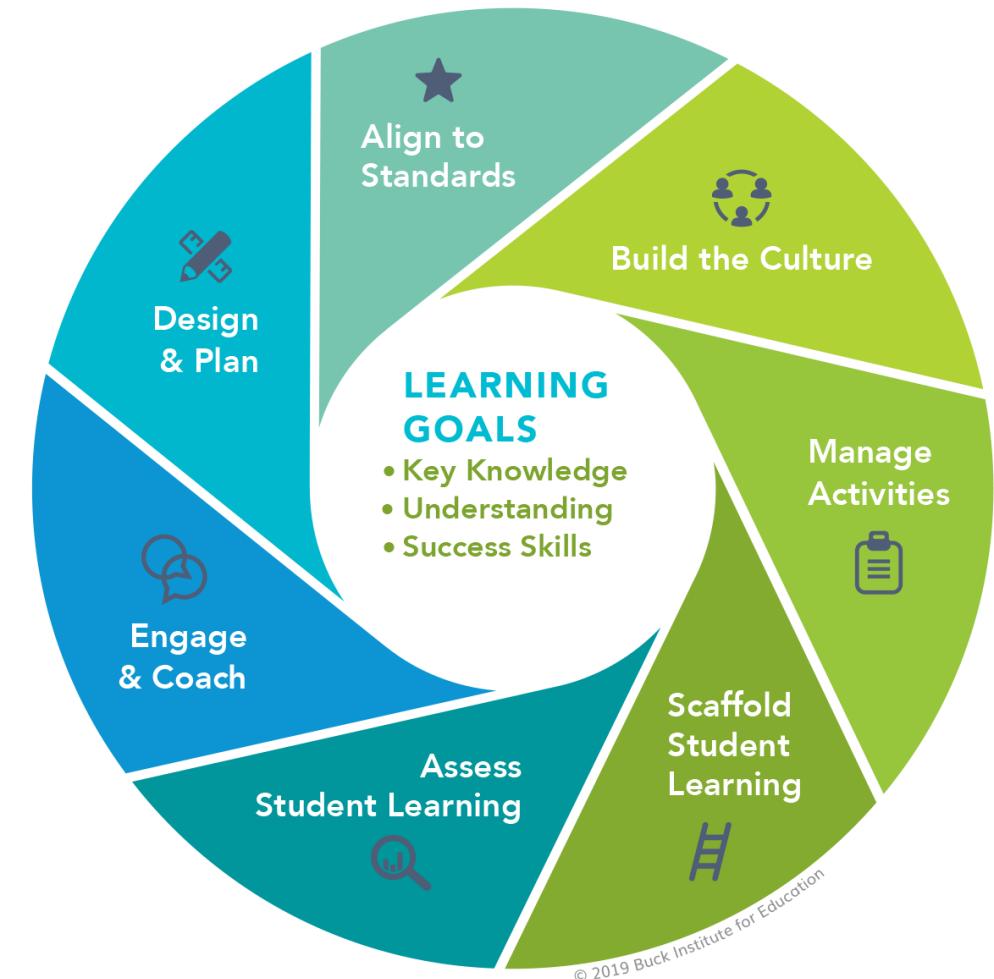


Gold Standard PBL

Seven Essential Project
Design Elements

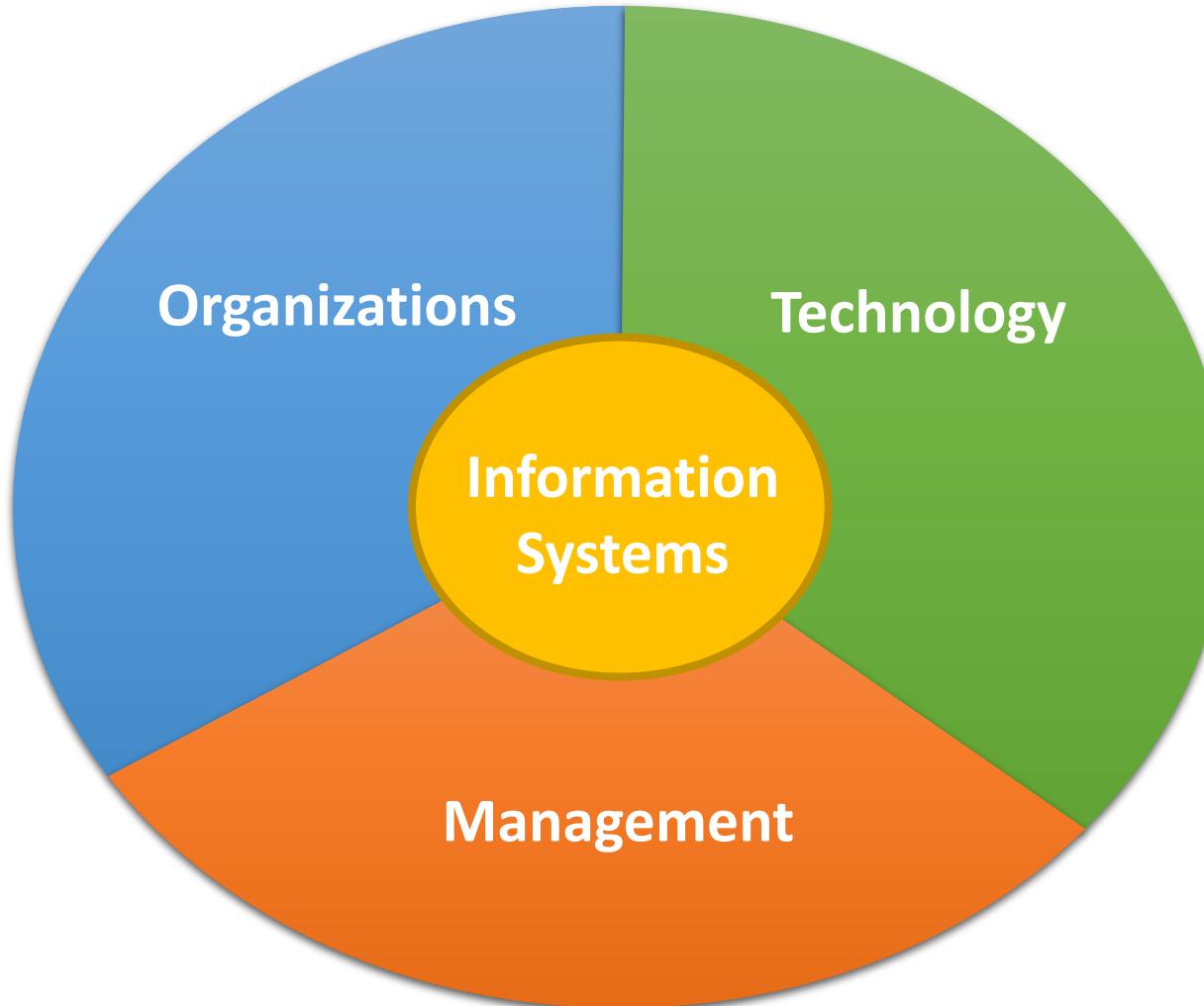
Gold Standard PBL

Seven Project Based
Teaching Practices

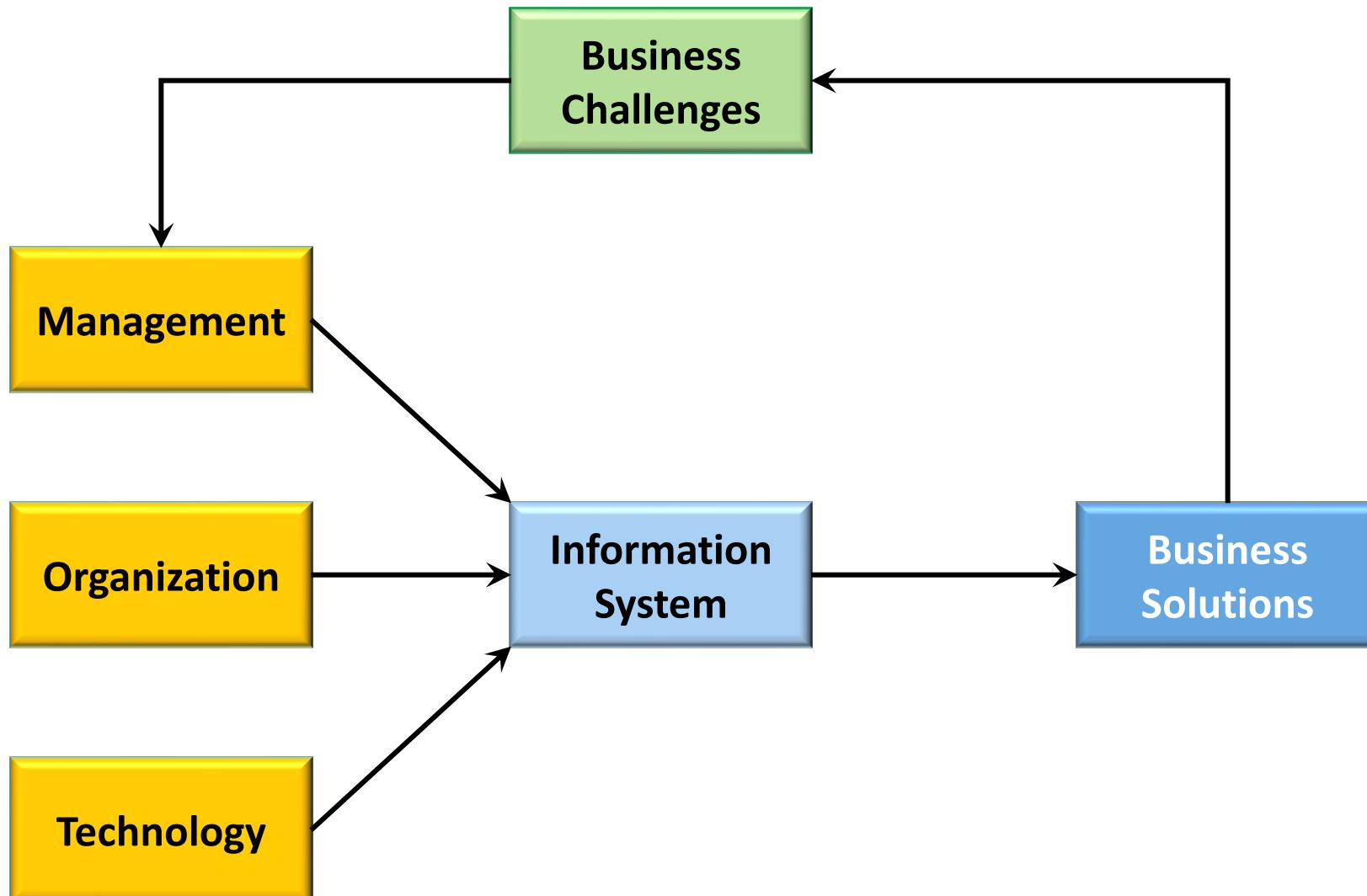


Information Management (MIS)

Information Systems

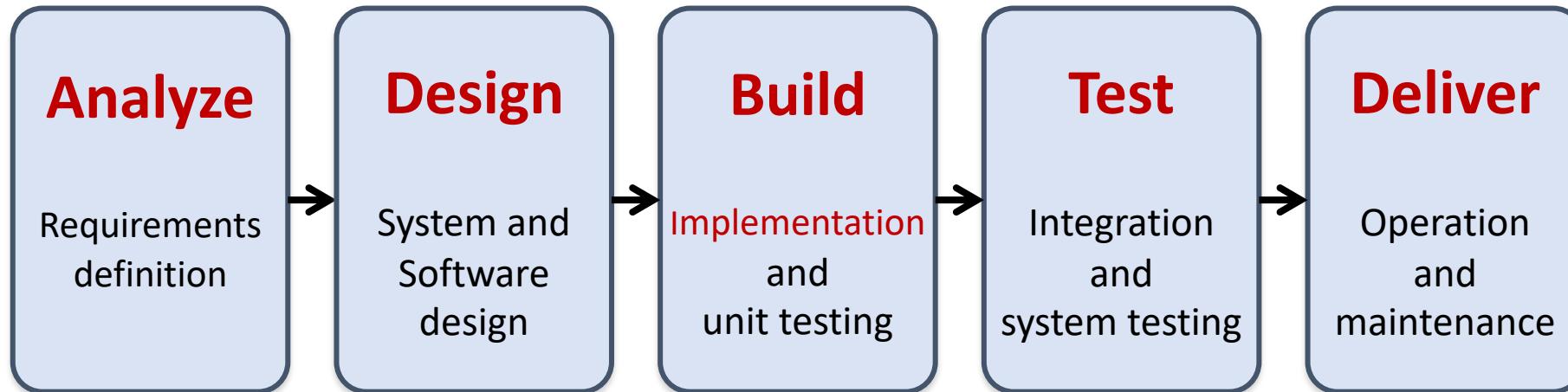


Fundamental MIS Concepts



Agile Software Engineering

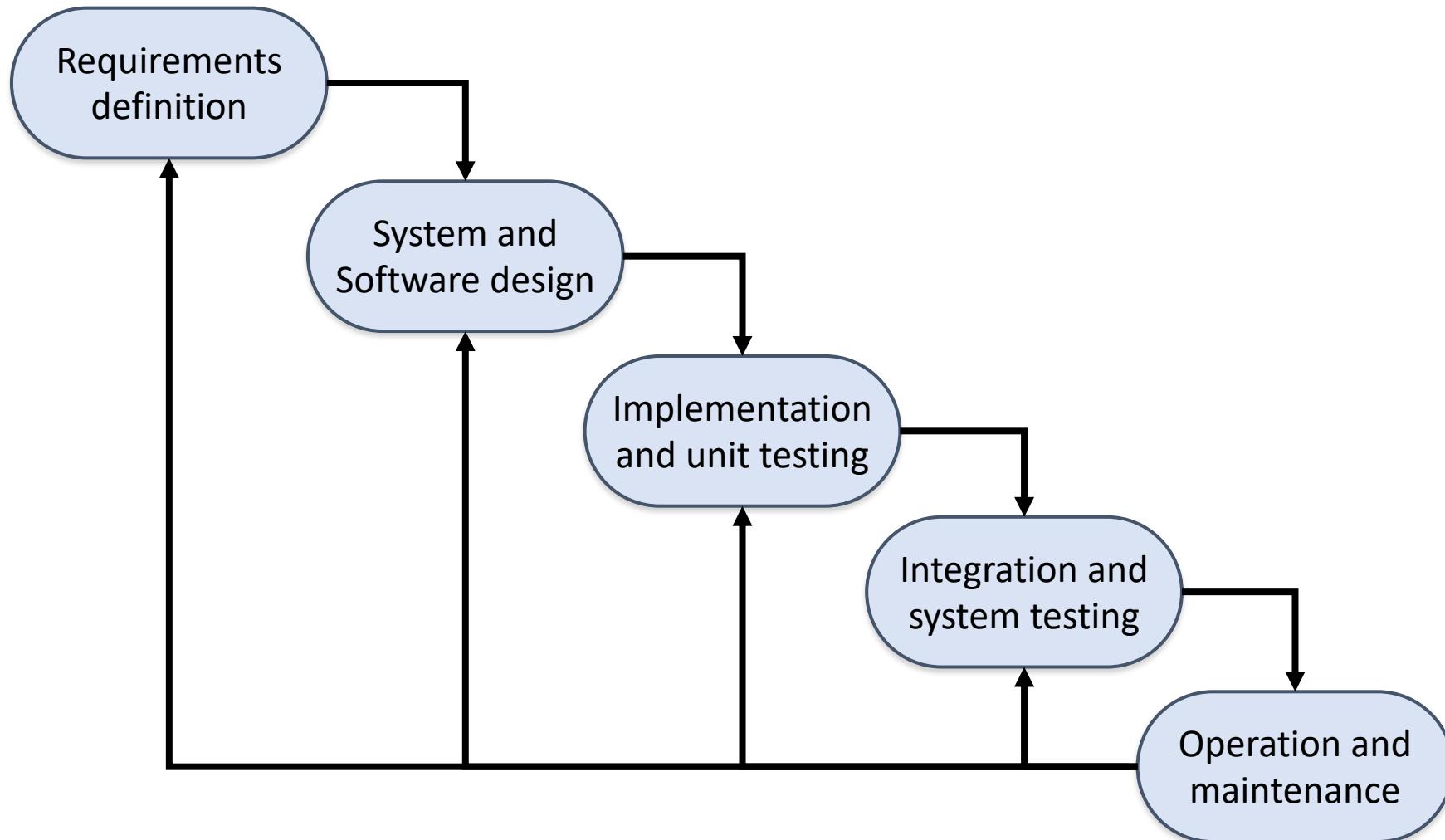
Software Engineering and Project Management



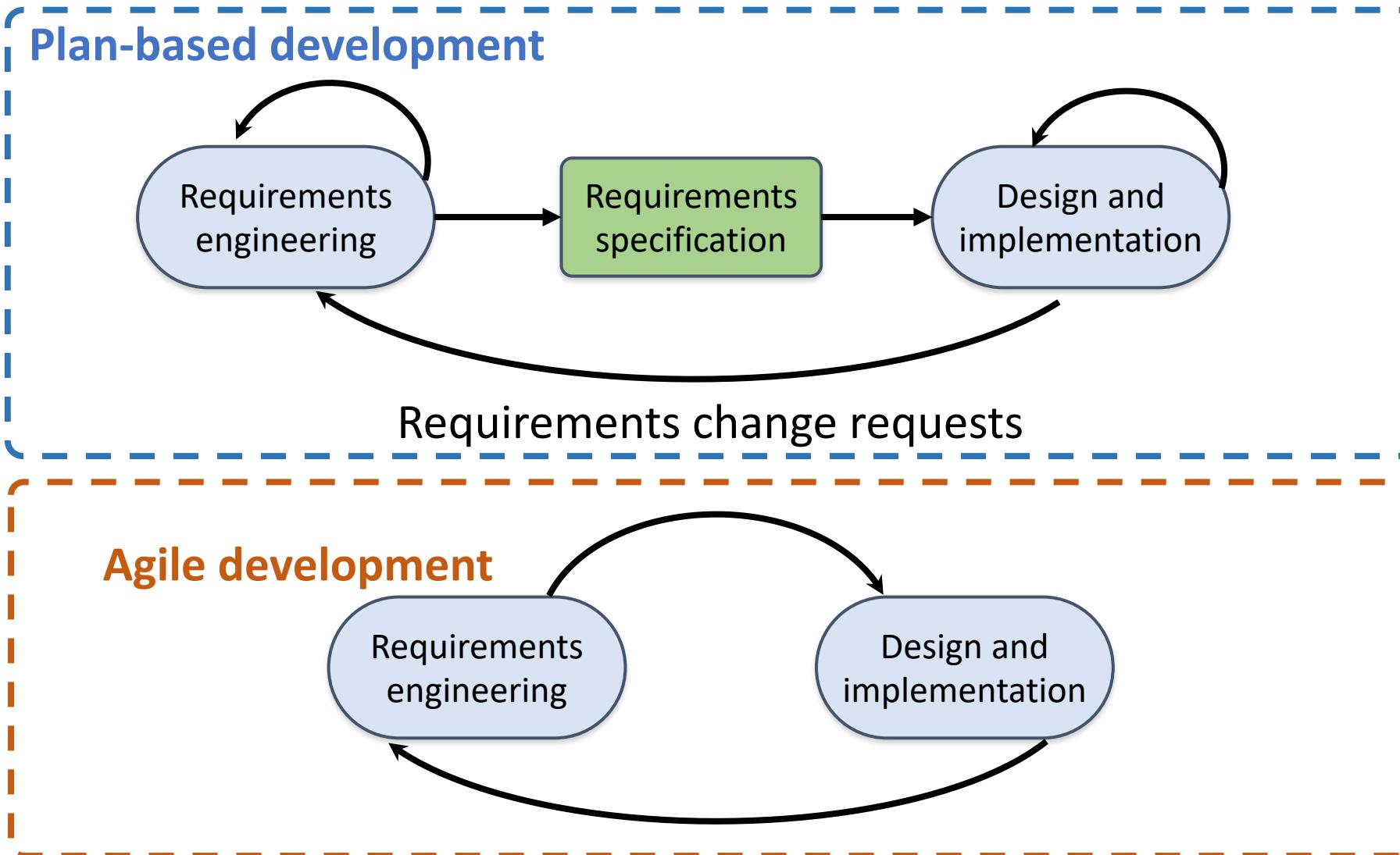
Project Management

Software Development Life Cycle (SDLC)

The waterfall model



Plan-based and Agile development



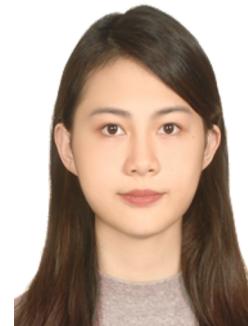
IMNTPU at the NTCIR-16 FinNum-3 Task: Data Augmentation for Financial Numclaim Classification

¹ Information Management, National Taipei University, New Taipei City, Taiwan

² Zeals Co., Ltd. Tokyo, Japan



Yung-Wei Teng¹



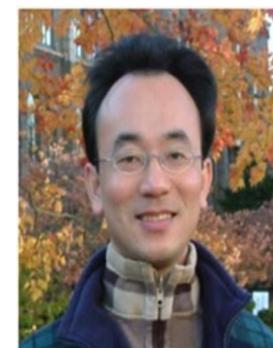
Pei-Tz Chiu¹



Ting-Yun Hsiao¹



Mike Tian-Jian Jiang²



Min-Yuh Day^{1,*}

myday@gm.ntpu.edu.tw

IMNTPU Dialogue System Evaluation at the NTCIR-16 DialEval-2 Dialogue Quality and Nugget Detection

¹ Information Management, National Taipei University, New Taipei City, Taiwan

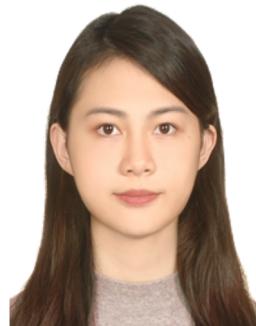
² Zeals Co., Ltd. Tokyo, Japan



Ting-Yun Hsiao¹



Yung-Wei Teng¹



Pei-Tz Chiu¹



Mike Tian-Jian Jiang²



Min-Yuh Day^{1,*}

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NTCIR-16 Conference, June 14-17, 2022, Tokyo, Japan

NTCIR-16

Best Poster Presentation Award



2022



IMNTPU at the NTCIR-16 FinNum-3 Task:
Data Augmentation for Financial Numclaim Classification



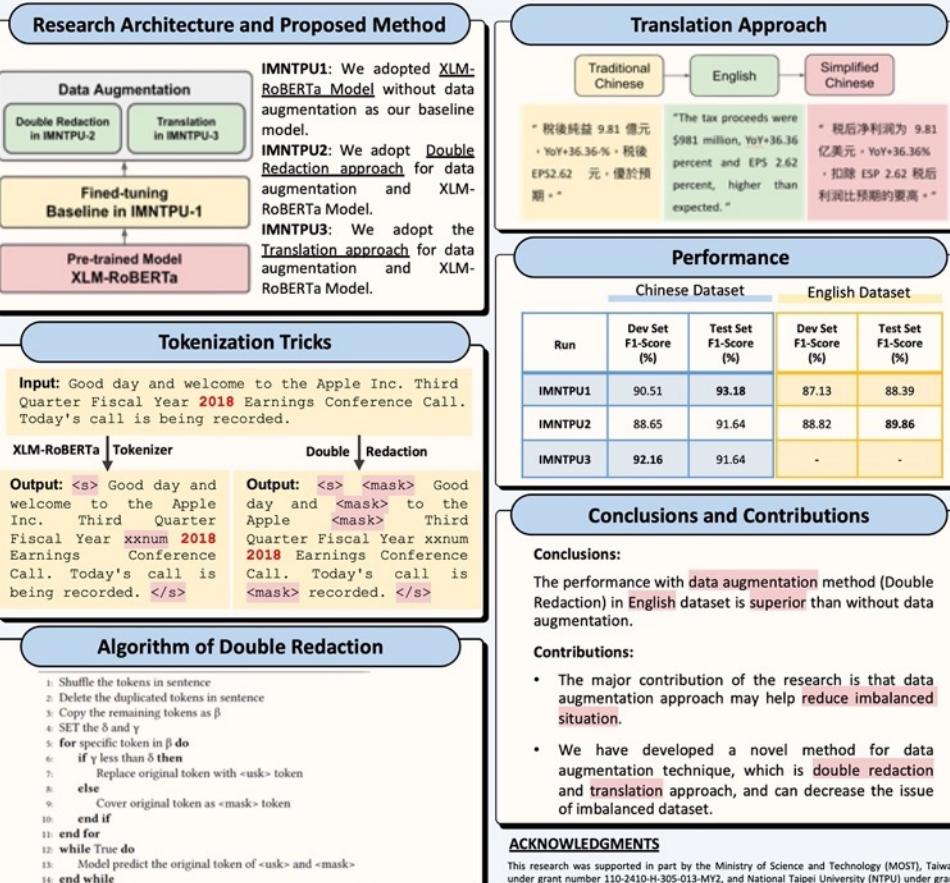
Yung-Wei Teng¹, Pei-Tz Chiu¹, Ting-Yun Hsiao¹, Mike Tian-Jian Jiang² and Min-Yuh Day^{1,*}

¹ Information Management, National Taipei University, New Taipei City, Taiwan

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This paper provides a detailed description of IMNTPU team at the NTCIR-16 FinNum-3 shared task in formal financial documents. We proposed the use of the XLM-RoBERTa-based model with two different approaches on data augmentation to perform the binary classification task in FinNum-3. The first run (i.e., IMNTPU-1) is our baseline through the fine-tuning of the XLM-RoBERTa without data augmentation. However, we assume that presenting different data augmentations may improve the task performance because of the imbalance in the dataset. Accordingly, we presented double redaction and translation method on data augmentation in the second (IMNTPU-2) and third (IMNTPU-3) runs, respectively. The best macro-F1 scores obtained by our team in the Chinese and English datasets are 93.18% and 89.86%, respectively. The major contribution in this study provide a new understanding toward data augmentation approach for the imbalanced dataset, which may help reduce the imbalanced situation in the Chinese and English datasets.



Information Management, National Taipei University

NTCIR-16 Conference, June 14-17, 2022, Tokyo, Japan



The 12th IEEE International Workshop on Empirical Methods for Recognizing Inference in TExt (IEEE EM-RITE 2023)

In conjunction with IEEE IRI 2023

August 4 - August 6, 2023

Bellevue, WA, USA

- **IMPORTANT DATES**

- Regular paper submission: May 15, 2023
- Notification of acceptance: June 12, 2023
- Camera-ready paper due: June 26, 2023
- Author registration due: July 3, 2023
- Conference events: August 4 - August 6, 2023

The 14th International Workshop on Mining and Analyzing Social Networks for Decision Support (MSNDS 2023)

In conjunction with IEEE/ACM ASONAM 2023

Marrakesh, Morocco
6-9 November 2023

- **IMPORTANT DATES**

- Paper submission deadline: August 21, 2023
- Acceptance notification: September 25, 2023
- Camera-ready paper deadline: October 10, 2023
- Author registration due: October 20, 2023
- Conference events: November 10-13, 2023

Acknowledgments: Research Projects

1. Applying AI technology to construct knowledge graphs of cryptocurrency anti-money laundering: a few-shot learning model
 - MOST, 110-2410-H-305-013-MY2, 2021/08/01~2023/07/31
2. Fintech Green Finance for Carbon Market Index, Corporate Finance, and Environmental Policies. Carbon Emission Sentiment Index with AI Text Analytics
 - NTPU, 112-NTPU_ORDA-F-003 , 2023/01/01~2024/12/31
3. Research on speech processing, synthesis, recognition, and sentence construction of people with language disabilities. Multimodal Cross-lingual Task-Oriented Dialogue System
 - NTPU, 112-NTPU_ORDA-F-004, 2023/01/01~2025/12/31
4. Use deep learning to identify commercially dental implant systems - observational study
 - USTP-NTPU-TMU, USTP-NTPU-TMU-112-01, 2023/01/01~2023/12/31
5. Metaverse Avatar Automatic Metadata Generation Module
 - FormosaVerse x NTPU, NTPU-111A413E01, 2022/12/01~2023/11/30
6. Establishment and Implement of Smart Assistive Technology for Dementia Care and Its Socio-Economic Impacts. Intelligent, individualized and precise care with smart AT and system integration
 - MOST, 111-2627-M-038-001-, 2022/08/01~2023/07/31

Summary

- EMI Teacher Community, AACSB, NTPU
- Teaching Experiences Sharing
- EMI Courses
- Project-based Learning (PBL)

Sharing Teaching Experiences in EMI Courses and Project-based Learning (PBL)

2023/5/22 (Monday) 13:00 - 15:00

Host: Prof. Yu-Chin Liu

Information Management, College of Management, Shih Hsin University (SHU)

2F, No. 111, Muzha Road, Section 1, Wenshan District, Taipei, Taiwan



Min-Yuh Day, Ph.D.
Associate Professor

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