SWS3023 WEB MINING

INTRODUCTION

ABOUT ME



LEK Hsiang Hui

Senior Lecturer

Department of Information Systems and Analytics

Teaches Courses on:

- Analytics
- Software Engineering

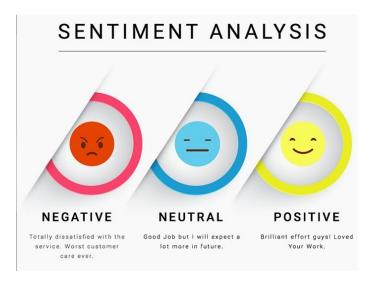
Undergraduates, Graduates, and Executives

ABOUT ME



Did PhD in the area Natural Language Processing (Sentiment Analysis)

ABOUT ME





Picture Quality



brilliant

Weight



Size



Power Button



small

difficult to access

about us

Based in Singapore's silicon valley, Blk 73 Launchpad, we are a big data analytics company, revolutionizing global and local brand analytics ranking and profiling. With billions of online conversations, we have the data and technologies to determine any brands' relative brand position globally. We have the ability to automatically conduct extensive user profiling for brands wanting to know more about their customers' preferences and desires. Through workshops and trainings, we help brands make sense of data and get them started with digital marketing.

what we offer

CUSTOMER INSIGHTS

Want to know what netizens are talking about your brand, competitors or a brand? How can you improve your services or business offerings?

INDUSTRY KNOWLEDGE

What is the latest trend happening - for your brand, your industry or target audience? What can we learn from others in your industry to help you in your marketing strategy?

INFLUENCER PROFILING

Who are your influencers? Can you turn them into leads? Or use them to bring in leads?



how we work + how we can help you



REPORTS

With our technology and the immense data that are available on the web, we can provide customer insights, industry knowledge and influencer profiling.



TRAININGS

We conduct trainings and workshops to help brands solve problems using their data and to provide knowledge to propel your marketing strategies. Let us help you understand analytics and marketing tactics.

Also Co-founded a Big Data Analytics Company

CONTACT



- f https://www.facebook.com/hsianghui
- ② @hsianghui
- in https://www.linkedin.com/in/hsianghui/
- hsianghui@nus.edu.sg

TEACHING ASSISTANT



Mr TAN Qiu Yu



qiuyu.87@gmail.com

OBJECTIVES AND OVERVIEW

Aim:

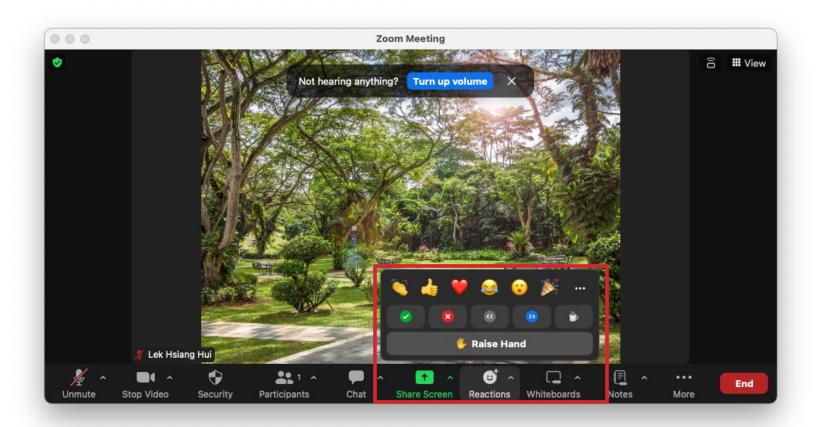
- Provide a good understanding of predictive analytics and its applications
- Provide a systematic approach to mine web content

Objectives

- Understand the conceptual foundations of predictive analytics
- Be able to programmatically mine web content
- Apply predictive modeling on web data

SOME HOUSE RULES (ZOOM)

Please respond in Zoom



TOPICS

Introduction to Analytics and Web Mining (12 May)

Predictive Analytics I
Predictive Analytics II
Mining Web Content I
Mining Web Content II
Mining Web Content III
Recommender Systems

Lectures include interactive in-class activities

July 2024				
Mon	Tues	Wed	Thurs	Fri
1	2 CRISP-DM & Predictive Analytics I Project Group Formation (10am-12pm) Lab 1 (1-3pm)	3 Predictive Analytics II (10am-12pm) Lab 2 (1-3pm) Consultation (3-6pm)	4 Mining Web Content I (10am-12pm) Lab 3 (1-3pm) Consultation (3-6pm)	5 Mining Web Content II (10am-12pm) Lab 4 (1-3pm) Consultation (3-6pm)
8 Mining Web Content III (10am-12pm) Lab 5 (1-3pm) Consultation (3-6pm)	9 Recommender System (10am-12pm) Lab 6 (1-3pm) Consultation (3-6pm)	10 Consultation (10-6pm)	11 Consultation (10-6pm)	12 Consultation (10-6pm)
15 Consultation (10-6pm)	16 Consultation (10-6pm)	17 Consultation (10-6pm)	18 Consultation (10-6pm)	19 Poster Submission
22	25	26	27	28

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15 Consultation (10-6pm)	16 Consultation (10-6pm)	17 Consultation (10-6pm)	3 additional lectures that provide the classic techniques to perform predictive analytics and/or handle web data (in red)	
22	25	26		

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15 Consultation (10-6pm)	16 Consultation (10-6pm)	17 Consultation (10-6pm)	18 Consultation (10-6pm)	19 Poster Submission	
3 additional lectures that teach you how to mine pretty much any website (in red)			27	28	

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15 Consultation (10-6pm)	16 Consultation (10-6pm)	Consultation (10 60m) Lab sessions equip you with hands on skills how to handle data with Python (e.g. Basics of Python,		19 Poster Submission	
		Pandas,			

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22	25	to p	to perform modeling with Python	

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22	25	Lab sessions to practice web scraping		28	

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22	25	Recommender Systems		28	

GROUP PROJECT

Work in groups of 4-5 (tentatively)

Self-propose an interesting analytics problem that requires some form of predictive analytics using web data

- Formulate a strategy to mine the web data
- Use appropriate analytics techniques to process the data
- Guidance will be provided along the way
- Planned consultations with the lecturer, ad-hoc consultations with the lecturer/TA

4 planned consultations with lecturer

- 1st consultation Problem formation and project scoping
- 2nd consultation Formulate strategies to mine sites (web scraping)
- 3rd consultation Project fine-tuning (analysis)
- 4th consultation Project fine-tuning (presentation)

ASSESSMENT*

Mainly project

- Participation (in labs/consultation, individual): 10%
- Analysis and Results: 60%
- Project presentation: 30%