



# Tropical Data Science School

21 December 2022 - 10 January 2023

 Registration Fee : RM4999 (US\$ 111)

*Open to all*

**\*\* ACCOMODATION AND MEALS ARE PROVIDED \*\***



It is ranked #143 in QS World University Rankings 2023.

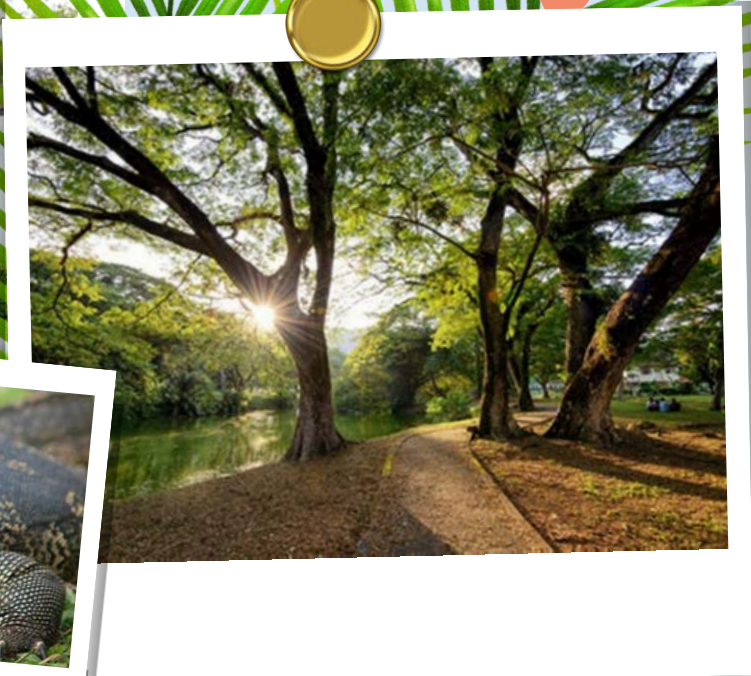
On top of that, USM is becoming a top sustainability-led university after being placed at No.4 in the recent Times Higher Education (THE-GIR) 2022 global sustainability rankings.


# Universiti Sains Malaysia (USM)

USM is an exemplary and enviable model of garden university. It is harmoniously organized garden campus that provides a platform for intellectual discourse into the exploration of human nature rich with tropical flora and fauna and forest habitats.

Located in Georgetown,  
Penang's capital which  
holds the UNESCO  
world heritage status!

—Don't miss the chance to take a leisurely stroll through the exquisite path walk in the evening as the golden ray pours through the leaves! And brace yourself for you will be likely to stumble upon one of USM's most renowned locals, the biawak, at the lake.





Students will be able to comprehend data science workflow, the many roles within data science, and the application of data science to actual situations through this curriculum.

Students will learn how to interpret and diagnose data which also includes how to handle data issues.

Students will also learn about the significance of storytelling in data science and how to convey the findings in a manner that is understandable to all.

Students will also be exposed about Malaysia's diverse cultures through food, clothing, among many others. After that, they will engage in team-building activities, excursions and visit historical places throughout Penang.



# Your AHA moments!





BUDDIES

# Buddies



Buddies are the student volunteers that help to bridge the gap between the international and local students.

The Buddies will ensure and assist international students in acclimatising to their new environment and surrounding

Buddies also aid students for international programme as well as providing information regarding USM, Penang and Malaysia.

They encourage interaction and exchanges of opinion between international students and local students in order to help build and expand social networks that transcend borders, countries and continents.



# Schedule (Week 1)

TIME	Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7
0800 - 0900			Breakfast		Breakfast		
0900 - 0930	Depart from hostel	Depart from hostel	Lecture 3	Depart from hostel	Depart to Penang Hill	Breakfast	Breakfast
0930 - 1000	Breakfast	Breakfast		Breakfast		Lecture 6	Lecture 7
1000 - 1100	Welcoming Session	Lecture 2	Depart to Padang Kota	Lecture 4	Penang Hill visit	Free time	Countryside Exploration
1100 - 1130	Ice breaking						
1130 - 1200	Cultural Activity	Free time	Penang Georgetown visit	Lecture 5			
1200 - 1230						Free time	
1230 - 1300	Lunch Break	Cultural Activity		Depart to USM			
1300 - 1330					Lunch Break	Cultural Activity	Free time
1330 - 1400	Lecture 1	Cultural Activity		Depart to Stadium			
1400 - 1430			Tea break		Tea break	Sweat it off : Captain Ball	
1430 - 1500	Campus Tour	Free time		Free time			Free time
1500 - 1530			Free time		Free time	Free time	
1530 - 1600	Tea break	Tea break		Free time			
1600 - 1630			Free time		Free time	Free time	
1630 - 1700	Campus Tour	Free time		Free time			
1700 - 1730			Free time		Free time	Free time	
1730 - 1830	Free time	Free time		Free time			
1830 - 1900			Free time		Free time	Free time	
1900 - 1930	Free time	Free time		Free time			
1930 - 1945			Dinner		Free time	Free time	
1945 - 2000	Free time	Free time		Free time			
2000 - 2230			Dinner		Free time	Free time	
2230							

# Schedule (Week 2)

TIME	Day 8	Day 9	Day 10	Day 11	Day 12
0800 - 0900		Depart from hostel			
0900 - 0930	Depart from hostel	Breakfast	Depart from hostel	Depart from hostel	Depart from hostel
0930 - 1000	Breakfast		Breakfast	Breakfast	Breakfast
1000 - 1100		Lecture 9		Lecture 11	Closing ceremony
1100 - 1130	Lecture 8		Lecture 10		
1130 - 1200					
1200 - 1230	Short break		Short break	Short break	
1230 - 1300	Group activity 1	Free time	Group activity 2	Group activity 3	
1300 - 1330					
1330 - 1400	Lunch Break	Lunch Break	Lunch Break	Lunch Break	
1400 - 1430					
1430 - 1500					
1500 - 1530				Presentation: Forum	
1530 - 1545	Cultural Activity	Free time	Cultural Activity		
1545 - 1600					
1600 - 1630				Tea Break	
1630 - 1645	Tea Break	Tea break	Tea Break		Free time
1645 - 1700					
1700 - 1730					
1730 - 1800					
1800 - 1830					
1830 - 1900					
1900 - 1930	Free time	Free time	Free time	Free time	
1930 - 1945					
1945 - 2000					
2000 - 2230					
2230					



# Instructors



DR. NOOR FARIZAH IBRAHIM

## What on Earth is Data Science?

Dr Noor Farizah Ibrahim works as a Senior Lecturer at the School of Computer Sciences, USM after receiving her PhD from the University of Bristol, United Kingdom. She is also a certified tester of the International Software Testing Qualifications Board (ISTQB) and a Huawei Certified ICT Associate and Academy Instructor in Artificial Intelligence (AI). Her research interests include Data/Text Analytics, Natural Language Processing, Machine Learning, and Social Media Research. She is currently teaching the Principle of Data Science and Analytics and Customer Behaviour and Social Media Analytics courses at USM.



DR. NASUHA LEE ABDULLAH

## Tell a Story with Data

Dr Nasuha Lee Abdullah holds a Doctorate in Engineering Business Management and is currently a senior lecturer at the School of Computer Sciences, USM. Prior to joining USM in 2009, Dr Nasuha had been in the Electrical and Electronics (E&E) Manufacturing Industry for over 15 years specialising in Quality Management. Her experience includes heading quality departments at multinational companies. As a former QA Manager, she knows the power of data, and her interest is in effective communication using data to drive decision-making.





## *Is the Zebra White with Black Stripes, or Vice Versa? Understanding Consumer Behaviour of the 21st Century*

Dr Syaheerah's research interests span the areas of human-computer interaction (HCI), particularly affective computing and behaviour analysis. Understanding the theory and design of a scalable and autonomous architecture of socio-emotional models in conversational agents is a recurring theme in her research. She teaches consumer behaviour and works on shopper insights since she is passionate about behavioural informatics. Through online studies, this entails detecting and quantifying the subconscious influences on consumer behaviour. She has authored multiple high-impact publications in the field and is a consulting trainer for business players in behavioural analysis using machine learning. She also enjoys playing badminton with her kids and going on hikes. When she has the time, she also loves to read.



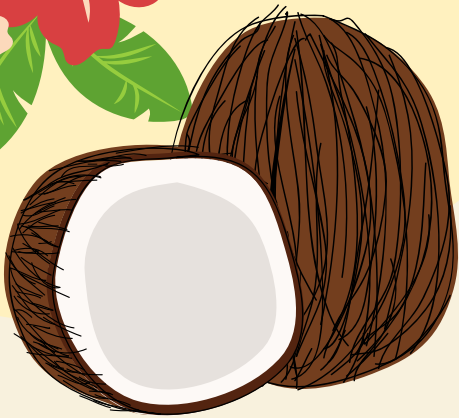
DR. SYAHEERAH LEBAI LUTFI

## *How Do You Make Sense of Data? Visualize It!*


Dr Nur Intan Raihana Ruhaiyem earned her PhD in Computational Bioinformatics and Image Processing in 2013 from the University of Queensland in Australia. She has been a trainer since 2018 and currently works as a Senior Lecturer at the USM School of Computer Sciences. She has been working as a trainer since 2018. Her specialisations are image processing, computer vision and visualisation. She believes that data visualisation has everything to assist human visual perception.



DR. NUR INTAN RAIHANA RUHAIYEM







## *Machine Learning: Ingredients to "Cook Up" Machines That Can Learn From Data*

Dr Jasy Liew Suet Yan is a Senior Lecturer at the School of Computer Science, USM, specialising in Sentiment Analysis, Natural Language Processing and Machine Learning. She earned her PhD from Syracuse University's School of Information Studies in the United States in 2016. Text mining, computational linguistics, emotional computing, and human-computer interaction are some of her extensive research interests. She builds emotion and sentiment recognition models in her research using machine learning. She is also a regular instructor for the machine learning (Postgraduate) course at the School of Computer Sciences. She likes to travel to learn about the quirks of many languages and civilisations.



DR. JASY LIEW SUET YAN

## *Say No to Banks and Middlemen, Say Yes to Blockchain!*

Ever wondered what blockchain was or how cryptocurrency works? Or how blockchain can play a role in our daily lives? This course will take you from blockchain's inception to the birth of cryptocurrency and the emergence of NFTs. Find out how blockchain allows Starbucks customers to trace where their beans come from. Learn how to set up your own blockchain wallet and claim your own "blockchain identity". Experience how digital signatures can be used to verify if messages are authentic. Interact with Web3 applications and NFT marketplaces. Upon completing this course, you will have a greater understanding of blockchain and all the things that it is capable of.



DR. TEH JE SEN

## Data Optimization with Excel Solver

Dr Wong Li Pei is an Associate Professor at the School of Computer Sciences, USM. He obtained his Bachelor of Computer Science and Master of Science (Computer Science) from USM and PhD from Nanyang Technological University (NTU), Singapore. His research fields includes nature-inspired metaheuristics, soft computing and hyper-heuristics and his current research focus is scheduling in transportation and manufacturing. He teaches undergraduate and postgraduate courses such as Artificial Intelligence, Computational Intelligence, Evolutionary Computing, and Business Intelligence & Decision Analytics. He reviews journal paper submissions for Applied Soft Computing, Swarm and Evolutionary Computation, Natural Computing, IEEE Access, Information Sciences and Swarm Intelligence.



DR. WONG LI PEI

## Keywords Discovery Using Simple Text Mining in R

Dr Gan Keng Hoon, a Senior Lecturer in the School of Computer Sciences, USM, obtained her PhD from Universiti Malaya (UM) in 2013. Her domains of specialization include information retrieval, structured retrieval, structured document representation and query optimization. Her primary research interests concentrate on generating semantically rich contents/ documents/ texts resulting from massive tagging and annotations by various levels of users, with applications focusing on automated content building and platform development for structured text processing.



DR. GAN KENG HOON

## Industry Trainer - Blockchain in Practice

TS. Dr Mohd Anuar Mat Isa is the founder of IExploTech ([www.iexplotech.com](http://www.iexplotech.com)). He has double-PhDs in technology, namely PhD in Computer Science from Universiti Putra Malaysia and PhD in Electrical Engineering from Universiti Teknologi Mara. He is a freelance researcher and also an embedded system developer. He is actively involved in Cryptographic Society NGO, the Malaysian Society for Cryptology Research (MSCR), and aggressively contributes to the Institut Pendidikan Tinggi Malaysia (IPTM) Blockchain Project. His research is focused on asymmetric cryptography, lightweight cryptography for embedded devices, embedded firmware security, formal methods, blockchain, trust & mathematical modelling, and international relations. He was a technology inventor with over ten patents during working at Mimos Berhad.



TS. DR. MOHD ANUAR MAT ISA





DR. MOHD HALIM MOHD NOOR

## *Image Analytics Using Deep Learning*

Dr Mohd Halim Mohd Noor is a Senior Lecturer in the School of Computer Sciences, USM. His research interests include machine learning, deep learning, computer vision and pervasive computing. In addition, logistics regression, neural networks and convolutional neural networks.



TS. DR. CHEW XINYING

## *Statistics for Data Science*

TS. Dr Chew XinYing is a Senior Lecturer in the School of Computer Sciences, USM and holds a PhD in Statistical Quality Control from Universiti Sains Malaysia. She is a certified trainer with Human Resources Development Fund (HRDF) as well as the trainer for MDEC-Intel AI Academy Programme and SAP Next-Gen Programme. She is the adjunct Research Fellow of Swinburne University of Technology, Sarawak Campus. The Malaysia Board of Technologists also recognises her as a Professional Technologist (MBOT). She worked for a renowned US multinational company's Advance Analytics Research team before beginning her academic career. Advanced analytics and statistical quality/process control are the focus of her study.



# Contact us!

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*Register now!*