Tropical Data Science School

20 - 27 July 2023
Registration Fee: USD 670
Open for all!
Accommodation and meals are provided

Penang Island, Malaysia
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.

Universiti Sains Malaysia

#143 in QS World University Ranking 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)

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.
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.
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.

You are going to LOVE our Buddies!
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<thead>
<tr>
<th>Time</th>
<th>ARRIVAL DATE</th>
<th>DAY 1</th>
<th>DAY 2</th>
<th>DAY 3</th>
<th>DAY 4</th>
<th>DAY 5</th>
<th>DEPARTURE DATE</th>
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<tr>
<td>07.00 - 08.00</td>
<td>Breakfast @ Hostel</td>
<td>Breakfast at IMCC</td>
<td>Depart to IMCC</td>
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<td>08.00 - 08.30</td>
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<td>09.00 - 09.30</td>
<td>Depart to IMCC</td>
<td>Depart to Georgetown</td>
<td>Breakfast</td>
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<td>09.30 - 10.00</td>
<td>Breakfast</td>
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<td>10.00 - 11.00</td>
<td>Welcoming Session &amp; Ice Breaking</td>
<td>Penang Georgetown Visit</td>
<td>Lecture Data Science 2</td>
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<td>11.00 - 11.30</td>
<td>Campus Tour</td>
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<td>11.30 - 12.00</td>
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<td>Final Presentation &amp; Closing Ceremony</td>
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<td>12.00 - 12.30</td>
<td>Lunch @ IMCC</td>
<td>Lunch @ IMCC</td>
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<td>Lunch @ IMCC</td>
<td>Final Presentation &amp; Closing Ceremony</td>
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<td>13.00 - 14.00</td>
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<td>Free &amp; Easy</td>
<td>Check-out and Departure to Penang Airport</td>
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<td>14.00 - 14.30</td>
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<td>14.30 - 15.00</td>
<td>Penang Airport Arrival and Check-in to the Accommodation</td>
<td>Cultural Class (Colours of Malaysia)</td>
<td>Penang Tour</td>
<td>Lecture Data Science 3</td>
<td>Lecture Data Science 4</td>
<td>Free &amp; Easy</td>
<td>Check-out and Departure to Penang Airport</td>
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<td>16.00 - 16.30</td>
<td>Lecture Data Science 1</td>
<td>Penang Tour</td>
<td>Lecture Data Science 3</td>
<td>Lecture Data Science 4</td>
<td>Snack</td>
<td>Return to Hostel</td>
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<td>16.30 - 17.00</td>
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<td>17.00 - 17.30</td>
<td>Return to Hostel</td>
<td>Cultural Class (Batik Painting)</td>
<td>Snack</td>
<td>Return to Hostel</td>
<td>Cultural Class (Batik Painting)</td>
<td>Snack</td>
<td>Return to Hostel</td>
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<td>17.30 - 18.00</td>
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<td>18.00 - 19.00</td>
<td>Return to Hostel</td>
<td>Free &amp; Easy</td>
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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.

What on Earth is Data Science?

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.

Tell a Story with Data
Dr. Syaheerah Lebai Lutfi

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. Nur Intan Raihana Ruhaiyem

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.

How Do You Make Sense of Data? Visualize It!

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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.

**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 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 include 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.

**Data Optimization with Excel Solver**

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.

**Keywords Discovery Using Simple Text Mining in R**

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**Industry Trainer - Blockchain in Practice**

TS. Dr Mohd Anuar Mat Isa is the founder of IExploTech (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 Institusi 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.
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.

Image Analytics Using Deep Learning

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.

Statistics for Data Science

Note: Some of our selected trainers are HRDF - Human Resources Development Fund certified (HRDP Corp), and are corporate trainers. Trainer slots are chosen based on the duration of the Tropical School, background of participants, hence not all trainers will be involved. Changes may apply.
Batik Chanting - Penang Beach - Campus Tour - Georgetown UNESCO World Heritage Tour & many more!

*Changes may apply depending on the time, weather, suitability*
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syaheerah.com

Madam Nik Nur Izzati (Izzy)
nikizzati@usm.my

Project Director

Coordinator