Master of Data Science Research Project Titles 2018 (Special Semester)
Lecturers' details can be obtained from the Faculty website (www.fsktm.um.edu.my)

No	Lecturer	Area	Topic
1	Dr. Sri Devi Ravana	Data Analytics and Waste Management Data Analytics and Information Retrieval Data Analytics and IT	1. **Data Analytic in Improving Waste Management in Malaysia** To identify the inefficiency of waste management and transportation in Malaysia. Explore how big data analytic can give a positive impact to a better management of waste and encourage recycling. 2. **Big Data Retrieval and Storage** To explore on Big Data and to show how information can be retrieved using different methodologies and especially using various computation techniques that help in the information retrieval process in a better way compared to traditional retrieval techniques. 3. **Big Data Analytics in Information Technology (IT) Service Delivery** To understand on what big data analytic are, how they work, some of their applications and how big data analytics can improve the IT service delivery in typical IT organization or IT outsourcing service provider's environment.
2	AP Dr. Rafidah Md Noor	Traffic congestion control	1. **Traffic congestion assessment method** The study aims to analyse the traffic congestion in urban road networks based on several parameters such as speed of vehicle, road segments and road conditions. The study shall be carried out a traffic congestion analysis in Klang Valley road networks and propose an improved mechanism to reduce traffic congestion in urban road networks. 2. **Improving traffic flow based on predictive data analysis in Highways**. The study aims to improve existing solution of traffic flow in Klang Valley highways by utilizing the existing traffic technologies and social data. The proposed solution will create a smooth traffic flow in highway intersection and improve average traffic speed.

3	Dr.Hamid Abdulla Jallb Al-Tulea	Image analysis	1. **Image processing techniques for Medical image analysis using Matlab** Image analysis includes the processing of input images for extracting the fundamental statistical data. The fundamental tasks in Image analysis are the image objects shapes, image object edges, image denoising, image enhancement, and measuring the region of interest (ROI) of the image.
4	Dr. Norliyana Mohd Shuib	Data analytics	1. **Framework for Prediction in Radiotherapy** Prediction in radiotherapy based on the medical record provided. The process involves preprocessing and modelling medical and text image. 2. **Location-based Clustering to identify Commuting Route** Cluster location and time information to identify communication route based on data provided. 3. **Type of Disease Prediction based on Medical Record** Prediction of the type of disease based on the medical record provided. The process involves preprocessing and modelling medical and text image.
5	Dr. Rohana Mahmud	Text/Data Harmonization 2. SocialMedia Features Classification 3. Speech to Text Retrieval & Analytic 4. Text to Picture Retrieval & Analytic 5. Dialogue Retrieval & Analytic 6. Discourse Features Analytic	Students to propose

6	Dr. Siti Soraya Abdul Rahman	Sentiment analysis	1. **Using sentiment analysis to understand customer's experience: The case of online shopping via Facebook**
7	AP Dr. Maizatul Akmar Ismail	Sentiment analysis, Data analytics	Students to propose
8	Dr. Nordiana Ahmad Karman Shah		1. **The development of academic librarians through data science**
9	Dr. Suraya Hamid		1. **Learning analytics Customers experience analysis** 2. **Social media related**
10	AP Dr. Chiew Thiam Kian	Data Visualization	1. **Visualising Routes on a Map for a Food Pick Up and Delivery System** To develop a data visualisation module for a Food Pick Up and Delivery System currently used by a company. The module will display routes traveled by riders who pick up and deliver foods from different locations on a map. The aim is to help the manager of the company to monitor the performance of the riders. Prior knowledge on JavaScript, CSS and JSON as well as building web user interface is an advantage. A full time student is preferable as this involves a project collaboration with the company.