

MKTG300001

Marketing: AI Application

Program : Global Summer Program

Term : Summer 2024

Duration : June 4, 2024 - July 26, 2024

Contact Hours : 54

Fudan Credits : 3

Course Description:

Artificial intelligence (AI) has the power to revolutionize marketing personalization. With AI, marketers can analyze vast amounts of customer data and create highly targeted and personalized marketing campaigns.

One of the key benefits of using AI for marketing personalization is the ability to gather and analyze customer data in real-time. AI algorithms can collect data from various sources, such as social media, website interactions, and purchase history, and use this information to create a detailed profile of each customer. This data can then be used to deliver personalized marketing messages and recommendations to each individual customer.

We will explain the logic of AI application in marketing through a series of quantitative analytics cases. We study how the proven marketing science frameworks can combine with cutting-edge data analytics tools, to transform companies' marketing decision making, and gain a critical edge in their business domain. Specifically, we will cover machine learning approaches to: learning customer lifetime value, customer segmentation and acquisition, managing current customer, predicting customer future behavior (response to internet ads, probability to churn, probability to purchase), recommendations and personalization of product and advertising content, predicting satisfaction during consumption process, and optimizing customer service.

We will further discuss the opportunities and challenges of AI application through cases and literature. We focus on data security and the impacts of government regulations.

Course Goals:

The goal of this course is to give students the expertise to initiate, participate in, manage, and evaluate marketing analytics efforts with substantial business impact. This requires knowledge of fundamental ideas at the intersection of statistics, machine learning, and human behavior, but also benefits from knowing specific techniques.

Prerequisites:

The prerequisite for this course is Data, Models and Decisions—or an introductory course in applied statistics and optimization, and Marketing Management.

If you are concerned about your background for the course, please contact us at studytour@fudan.edu.cn.

Textbook & Reference:

- The Analytics Edge by Dimitris Bertsimas, Allison O’Hair and William Pulleyblank, Dynamic Ideas LLC, 2016.

Schedule:

Lecture	Date	Time	Topic
1	June 4, 2024	Online Sessions Lecture 1 - 8: 08:30-12:00 BJT (UTC+8)	AI application in marketing
2	June 6, 2024		Transforming marketing strategy
3	June 11, 2024		Transforming firms’ and users’ channel choice
4	June 13, 2024		Personalizing customer segmentation and acquisition
5	June 18, 2024		Predicting individual customer needs
6	June 20, 2024		Personalizing customer churn management
7	June 25, 2024		Predicting customer response to internet ads
8	June 27, 2024		Personalizing product recommendation
9	July 22-July 26, 2024	Offline Sessions Lecture 9 - 12: TBD	Personalizing product innovation
10			Personalizing customer service
11			Challenges and risk of AI application in Marketing
12			Thesis

Assessment:

Assessment Task	Weighting
1. Individual Assignments	45%
2. Class Participation	10%
3. Thesis	45%

Grading Scale:

Grades	A	A-	B+	B	B-	C+	C	C-	D	F
100	90-100	85-89	82-84	78-81	75-77	71-74	66-70	62-65	60-61	<60

The instructor will use the grading system as applied by Fudan University.

Credit Point Value:

Component	Contact Hours	Fudan Credits
Academic Lectures	44	3
Thesis/Exam	4	
Field Trip	3	
Seminar	3	
Total	54	

At Fudan University, the duration of one contact hour is 45 minutes, and 18 contact hours are equivalent to 1 credit.

Note: The document is subject to change at the discretion of School of Management, Fudan University.