

Ta-Wei (David) Huang

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Academic Positions

National University of Singapore
NUS Business School
Assistant Professor of Marketing, 2025 – Now.

Education

Harvard Business School
Ph.D. Marketing, 2020 – 2025.

National Taiwan University
M.S. Statistics, 2015 – 2017.

National Tsing Hua University
B.S. in Quantitative Finance, 2011 – 2015.

Research Interests

Topic: Customer Value Management, Targeting and Personalization, Customer Privacy

Method: Causal Machine Learning, Multitask and Transfer Learning, Representation Learning, Deep Learning, Reinforcement Learning, Differential Privacy, Fair Machine Learning

Publications

1. **Doing More with Less: Overcoming Ineffective Long-term Targeting Using Short-Term Signals**
Ta-Wei Huang and Eva Ascarza (2024).
Marketing Science, 43(4), 863-884.

Working Papers

1. **Incrementality Prediction: Synergizing Past Experiments for Intervention Personalization.**
Ta-Wei Huang, Eva Ascarza, and Ayelet Israeli (2025).
Under second-round review at *Journal of Marketing Research*.
Winner, The Vithala R. and Saroj V. Rao ISMS Doctoral Dissertation Award, 2024.
Winner, MSI Alden G. Clayton Doctoral Dissertation Competition, 2024.
2. **Improving Targeting with Privacy-Protected Data: Honest Calibration of Treatment Effects.**
Ta-Wei Huang and Eva Ascarza (2025).
Revise and resubmit at *Journal of Marketing Research*.
Featured in HBS Working Knowledge: "Navigating Consumer Data Privacy in an AI World."

3. **Dynamic Personalization with Multiple Customer Signals: Multi-Response State Representation in Reinforcement Learning.**

Liangzong Ma, Ta-Wei Huang, Eva Ascarza, and Ayelet Israeli (2025).

Revise and resubmit at *Marketing Science*.

Selected Work-in-progress

1. **Data Shift and Algorithmic Targeting.**

2. **Machine Unlearning and Targeting.**

Joint work with Gilian Ponte.

Awards, Honors, and Grants

Startup Grant, National University of Singapore, 2025 – 2029.

Winner, The Vithala R. and Saroj V. Rao ISMS Doctoral Dissertation Award, 2024.

Winner, MSI Alden G. Clayton Doctoral Dissertation Competition, 2024

AMA-Sheth Foundation Doctoral Consortium Fellow, 2023

ISMS Marketing Science Doctoral Consortium Fellow, 2022.

ISMS Marketing Science Doctoral Consortium Fellow, 2021.

Summer Research Fellowship, Institute of Mathematics, Academia Sinica, 2015

Phi Tau Phi Scholastic Honor Society, 2015

First Prize, International ICT Innovation Competition, 2014

Hui-Chun Chin and Tsung-Dao Lee Undergraduate Research Endowment, 2014

Undergraduate Research Grants, Ministry of Science and Technology Taiwan, 2013

Dean's Award of Outstanding Academic Performance, National Tsing Hua University, 2013

Academic Excellence Award, National Tsing Hua University, 2011, 2013, 2014

Seminar and Conference Presentations

2026: The Marketing Analytics Symposium Sydney (Oral, Scheduled).

2025: National Taiwan University, Annual Conference of the European Marketing Academy (Oral), Rotterdam School of Management, Harvard Business School.

2024: Conference on Digital Experimentation @ MIT (Oral), University of British Columbia, University of Southern California, Singapore Management University, National University of Singapore, ISMS Marketing Science Conference (Oral), American Causal Inference Conference (Poster), Interactive Marketing Research Conference (Oral), Harvard Business School.

2023: Conference on Digital Experimentation @ MIT (Oral), Marketing Dynamics Conference (Oral), ISMS Marketing Science Conference (Oral), American Causal Inference Conference (Oral), Harvard Business School.

2022: ISMS Marketing Science Conference (Oral), American Causal Inference Conference (Poster), ISMS Marketing Science Conference (Oral), Harvard Business School, Harvard Business School Digital Workshop.

2020: National Tsing Hua University (Institute of Service Science), National Tsing Hua University (Institute of Statistics and Data Science).

Teaching Experience

National University of Singapore

Customer Analytics and Visualization (Undergraduate)	Semester 2 2026
Marketing Analytics Visualisation and Communications (MSc)	Semester 2 2026

Harvard Business School

Teaching Fellow, Managing Customers for Growth (MBA Elective)	Fall 2024
Teaching Fellow, Data-driven Marketing (Harvard Business Analytics Program)	Fall 2023
Teaching Fellow, Managing Customers for Growth (MBA Elective)	Fall 2023
Teaching Fellow, Managing Customers for Growth (MBA Elective)	Fall 2022

Online Courses

Instructor, Data-informed Product Strategy (2,043 students; Evaluation: 4.9/5.0)

Instructor, Business Analytics Using R (1,846 students; Evaluation: 4.9/5.0)

Instructor, Text Mining Using R (519 students; Evaluation: 4.6/5.0)

Others

Instructor, Introduction to R Programming, Taiwan Academy of Banking and Finance	Spring 2020
Instructor, Business Analytics Using R, Taiwan Academy of Banking and Finance	Spring 2020
Mentor, Taiwanese Data Science Mentorship Program for Working Professionals	Spring 2020
Industry Mentor, Business Analytics Using Data Mining (NTHU)	Fall 2019

Cases and Teaching Materials

Travelogo: Understanding Customer Journeys

Eva Ascarza and Ta-Wei Huang (2024). HBS Teaching Note [524044]

Customer Data Privacy

Eva Ascarza and Ta-Wei Huang (2023). HBS Background Note [524005]

Design and Evaluation of Targeted Interventions

Eva Ascarza and Ta-Wei Huang (2023). HBS Technical Note [524034], Dataset [524703]

Managing Customer Retention at Teleko

Eva Ascarza and Ta-Wei Huang (2023). HBS Teaching Note [524036], Dataset [524704]

Academic Service

Ad-hoc Referee: Marketing Science, Journal of Marketing Research, Management Science, Computational Statistics and Data Analysis, CIST

Industry Experience

Migo.tv, Data Team Lead, 2019 — 2020.

Lead and deliver data science projects across content acquisition, marketing, user experience, personalization, and product experimentation.

Mastercard Data and Services, Consultant, 2018 — 2019.

Develop data-informed business strategies, uncover insights from Mastercard data, and build analytics capabilities for leading retailers, restaurants, and financial institutions across Greater China and Southeast Asia.

InrayTek Inc., Data Scientist, 2017.

Develop core NLP and text mining algorithms powering competitive intelligence platforms.

Yoctol Info., Intern Data Scientist, 2017.

Conduct research in reinforcement learning and develop algorithms for the company's intelligent chat-bot service.

Line TV, Intern Data Scientist, 2017.

Develop content recommendation algorithms, build a view-count forecasting system, and deliver data analyses to inform strategic decisions.

Others

Programming: R, Python, C++, C, Java, SQL, Spark, Keras, Tensorflow, Stan

Software: Tableau, SPSS, SAS, Google Cloud, AWS

Languages: English (Fluent), Mandarin (Native), Tâi-Gí (Intermediate)

Personal Interests: Hiking, 津々浦々