YANHAN (SAVANNAH) TANG

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EDUCATION

Carnegie Mellon University (Tepper School of Business)	Pittsburgh, USA
PhD in Operations Management, minor in Machine Learning & Statistics (expected)	*2018.8 - 2024.5*
MS in Operations Management, minor in Optimization	*2018.8 - 2021.5*
Carnegie Mellon University (School of Computer Science)	Pittsburgh, USA
MS in Machine Learning	*2022.1 - 2023.5*
Tsinghua University (School of Economics and Management)	Beijing, China
BS in Information Management and Information Systems	*2014.9 - 2018.7*

RESEARCH INTERESTS

Application: Child welfare, healthcare, organ allocation, personalized marketing

Methodology: Machine learning, optimization, reinforcement learning, deep learning

REPRESENTATIVE WORKING PAPERS

1. Multi-Armed Bandits with Endogenous Learning Curves: Applications to Split Liver Transplantation, 2023. [Link to paper]
   Yanhan (Savannah) Tang, Andrew Li, Alan Scheller-Wolf, Sridhar Tayur.
   Major revision, **Manufacturing & Service Operations Management (MSOM)**.

   - *Runner-up*, 2023 Decision Analysis Society Student Paper Award
   - *Runner-up*, 2023 POMS CSOM Best Student Paper Competition
   - *Second place*, POMS-HK 2023 Best Student Paper Competition
   - *Finalist*, 2022 INFORMS Service Science Best Cluster Paper Award
   - Presented at MSOM Healthcare SIG 2023. Acceptance rate: 26%
   - Media coverage: Tepper Research Rundown, Ph.D. Health Care Research Showcase

2. Split Liver Transplantation: An Analytical Decision Support Model, 2023. [Link to paper]
   Yanhan (Savannah) Tang, Alan Scheller-Wolf, Sridhar Tayur, Emily R. Perito, John P. Roberts.
   Major revision, **Operations Research**.

   - *First place*, 2022 INFORMS DEI Best Student Paper Award
   - *Winner*, INFORMS Public Sector Operations Research 2022 Best Paper Award
   - *Finalist*, 2022 INFORMS IBM Best Student Paper Award Competition
   - Presented at MSOM Healthcare SIG 2022. Acceptance rate: 16%
   - Media coverage: Tepper Stories, Health Care Initiative, DEIC blog

WORK IN PROGRESS

3. Predictive Risk Models-Human Teaming and Impacts of System Load in Child Welfare Screening, 2023.
   Work in progress. [Link to abstract]
   Yanhan (Savannah) Tang, Zoey Jiang, Alan Scheller-Wolf, Justine Galbraith, Lindsey Lacey.

- Presented at POMS 2023. Upcoming presentation: Child Welfare Conference 2023 (Cornell)

4. A Nested Bayesian Model for Inferring Customer Life-Changing Events Based on Financial Transaction Data, 2023. *Work in progress.* [Link to abstract]
   Yanhan (Savannah) Tang, Alan Montgomery.

   - Presented at ISMS Marketing Science Conference 2023 and POMS 2023

5. The Next Best Offer Algorithms for Customer Relationship Management in Financial Services, 2023. *Work in progress.*
   Yanhan (Savannah) Tang, Alan Montgomery.

6. Split Liver Transplantation Reduces Total Patient Deaths and Improves Fairness, 2023. *Work in progress.*
   Yanhan (Savannah) Tang, Alan Scheller-Wolf, Sridhar Tayur, Emily R. Perito, John P. Roberts.

OTHER WORKING PAPERS

7. Efficiency, Fairness, and Stability in Peer-to-Peer Ridesharing, 2020. [Link to paper]
   Hoon Oh*, **Yanhan (Savannah) Tang*** (co-first), Zong Zhang, Alexander Jacquilet, Fei Fang.
   Technical report for *Mobility21*.

8. When Is It Permissible For Artificial Intelligence To Lie? A Trust-Based Approach, 2022. [Link to paper]
   Joy Lu, Tae Wan Kim, Zhaoqi Cheng, **Yanhan (Savannah) Tang**, Kyusong Lee, John Hooker.
   In preparation.

   - *Winner*, Society for Business Ethics (SBE) Annual Meeting 2021 Best Paper Award
   - *Finalist*, 2021 SBE Best Practical Solutions Award

TEACHING AND EDUCATIONAL EXPERIENCE

2022 Summer	(Undergrad) Operations Management (Course rating: 4.33/5)		Instructor

- 100% response rate in faculty course evaluation with a class size of 21.
- Highest overall course rating for the 25 undergraduate *Operations Management* courses taught by ten different instructors at CMU in the last four years.

2021 Summer	(Undergrad) Operations Management	Neda Mirzaeian	Grader
2020 ∼ 2022 Fall	(MBA) Operations Management	Sridhar Tayur	TA
2020 Fall	(MBA) New Product Management	Peter Boatwright	Grader
2020 Fall	(MBA) Marketing Management	Peter Boatwright	Grader
2020 Summer	(Undergrad) Operations Management	Mehmet Aydemir	Grader
2020 Spring	(MBA) Strategies in Information Markets	Peter Stuttgen	Grader
2020 Spring	(MBA) Sustainable Operations	Alan Scheller-Wolf	TA

HONORS AND GRANTS

Runner-up, 2023 POMS CSOM Best Student Paper Competition	POMS, 2023
Second place, POMS-HK 2023 Best Student Paper Competition	POMS-HK, 2023
First place, 2022 DEI Best Student Paper Award	INFORMS, 2022
Winner, Public Sector Operations Research 2022 Best Paper Award	INFORMS, 2022
Finalist, IBM Best Student Paper Award Competition	INFORMS, 2022
Finalist, Service Science Best Cluster Paper Award	INFORMS, 2022

Litzenberger Family Fund	Tepper, 2022
PNC Presidential Fellowship	Tepper, 2022
PNC Center for Financial Services Innovation Fellowship	CMU, 2021 $\sim$ 2024
Dean's Research Funding	Tepper, 2021
Winner, Society for Business Ethics Annual Meeting Best Paper Award	SBE, 2021
Finalist, Society for Business Ethics Best Practical Solutions Award	SBE, 2021
Health Care Initiative Funding	Tepper, 2020 $\sim$ 2021
Graduate Student Assembly/Provost Conference Funds	CMU, 2020 & 2022
Graduate Crosswalk GuSH Grant (Co-PI)	CMU, 2019 $\sim$ 2020
William Larimer Mellon Fellowship	CMU, 2018 $\sim$ 2023

PROFESSIONAL SERVICE

Co-chair, 2023 INFORMS PSOR Best Paper Award	2023
Session co-chair, 2023 INFORMS Healthcare Conference & Annual Meeting	2023
Advisor, MBA/MSBA capstone projects	2021 $\sim$ 2023
Student liaison, Health Analysis Society (HAS) of INFORMS	2021 $\sim$ 2022
Treasurer, CMU INFORMS Student Chapter	2019 $\sim$ 2020
Co-organizer, CMU INFORMS YinzOR Student Conferences	2019 $\sim$ 2022

PROGRAMMING SKILLS AND LANGUAGES

Programming Language: Python, SAS, SQL, R

Language: English (fluent), Mandarin (native)

REFERENCE

Professor Alan Scheller-Wolf (Chair)

Richard M. Cyert Professor of Operations Management

Tepper School of Business, Carnegie Mellon University

Email: awolf@andrew.cmu.edu

Professor Sridhar Tayur

University Professor of Operations Management; Ford Distinguished Research Chair

Tepper School of Business, Carnegie Mellon University

Email: stayur@cmu.edu

Professor Andrew Li

Assistant Professor of Operations Research

Tepper School of Business, Carnegie Mellon University

Email: aali1@andrew.cmu.edu

Professor Zhaohui (Zoey) Jiang

Assistant Professor of Business Technologies; BP Junior Faculty Chair

Tepper School of Business, Carnegie Mellon University

Email: zhaohuij@andrew.cmu.edu

Professor Alan Montgomery

Professor of Marketing; Head, Ph.D. Program

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