Dengwang Tang

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EDUCATION

Ph.D. Electrical and Computer Engineering (GPA: 4.00) 2021
Advisor: Vijay Subramanian
Dissertation: Games in Multi-Agent Dynamic Systems: Decision Making with Compressed Information
University of Michigan, Ann Arbor, MI

M.S., Mathematics (GPA: 4.00) 2021
University of Michigan, Ann Arbor, MI

M.S., Electrical and Computer Engineering (GPA: 4.00) 2018
University of Michigan, Ann Arbor, MI

B.S.E., Electrical and Computer Engineering (GPA: 3.81) 2016
University of Michigan – Shanghai Jiao Tong University Joint Institute
Shanghai Jiao Tong University, Shanghai, China

B.S.E., Computer Engineering, *summa cum laude* (GPA: 3.93) 2016
Minor: Mathematics
University of Michigan, Ann Arbor, MI

WORKING EXPERIENCE

Postdoctoral Researcher October 2022 – Present
University of Southern California, Los Angeles, CA
Advisors: Rahul Jain, Ashutosh Nayyar, and Pierluigi Nuzzo

Postdoctoral Researcher October 2021 – September 2022
University of California, Berkeley, CA
Advisor: Venkatachalam Anantharam

Software Engineering Intern May 2019 – August 2019
Google LLC., San Francisco, CA

TEACHING EXPERIENCE

Graduate Student Instructor (3 times)
University of Michigan, Ann Arbor, MI
EECS301: Probabilistic Methods in Engineering Winter 2020
EECS501: Probability and Random Process Winter 2018, Fall 2018
Responsibilities: Grading exams, holding discussion sessions and office hours

Teaching Assistant
UM-SJTU Joint Institute, Shanghai Jiao Tong University, Shanghai, China
VV285: Honors Calculus III Summer 2013
Responsibilities: Grading homeworks and exams, holding discussions sessions and office hours

PUBLICATIONS AND WORKING PAPERS

Journal Publications

1. **D. Tang**, H. Tavafoghi, V. G. Subramanian, A. Nayyar, D. Teneketzis, "Dynamic Games among Teams with Delayed Intra-Team Information Sharing," Dynamic Games and Applications (2022)
2. **D. Tang**, V. G. Subramanian, "Random Walk Based Sampling for Load Balancing in Multi-server Systems," Proceedings of the ACM on Measurement and Analysis of Computing Systems (2019), Vol. 3(1), p. 14
3. **D. Tang**, V. G. Subramanian, "Eigenvalues of LRU via a Linear Algebraic Approach," Operation Research Letters (2018), Vol. 46(2), p.193-198

Preprints

1. B. Hao, R. Jain, **D. Tang**, Z. Wen, "Bridging Imitation and Online Reinforcement Learning: An Optimistic Tale," *arXiv preprint arXiv:2303.11369* (2023)
2. **D. Tang**, V. G. Subramanian, "Derandomized Load Balancing using Random Walks on Expander Graphs," *arXiv preprint arXiv:1901.09094* (2019)
3. **D. Tang**, V. G. Subramanian, "Approximately Envy-Free Spectrum Allocation with Complementarities," *arXiv preprint arXiv:1606.01457* (2016)

Conference Papers

1. **D. Tang**, A. Nayyar, R. Jain, "A Novel Point-based Algorithm for Multi-agent Control Using the Common Information Approach," IEEE Conference on Decision and Control (CDC), (2023)
2. **D. Tang**, H. Tavafoghi, V. G. Subramanian, A. Nayyar, D. Teneketzis, "Private Information Compression in Dynamic Games among Teams," IEEE Conference on Decision and Control (CDC), (2021)
3. **D. Tang**, V. G. Subramanian, "Derandomized Asymmetrical Balanced Allocation," 57th Annual Allerton Conference on Communication, Control, and Computing, Monticello, IL, USA, (2019)
4. **D. Tang**, V. G. Subramanian, "Balanced Allocation on Graphs with Random Walk Based Sampling," 56th Annual Allerton Conference on Communication, Control, and Computing, Monticello, IL, USA, (2018) pp. 765-766.

TALKS

Point-based Algorithm for Multi-agent Control Using the Common Information Approach 2023
SoCal Control Workshop at University of California Santa Barbara, Isla Vista, CA

Private Information Compression in Dynamic Games among Teams 2021
IEEE Conference on Decision and Control (CDC), remote due to pandemic

Dynamic Games among Teams with Asymmetric Information 2021
Centre for Intelligent Machines (CIM) and Groupe d'études et de Recherche en Analyse des Décisions (GERAD) Virtual Informal Systems Seminar, Montréal, QC (remote due to pandemic)

Derandomized Asymmetrical Balanced Allocation 2019
57th Annual Allerton Conference on Communication, Control, and Computing, Monticello, IL

Balanced Allocation with Random Walk Based Sampling 2019
Stanford CS Theory Lunch, Stanford, CA

Random Walk Based Sampling for Load Balancing in Multi-Server Systems 2019
ACM SIGMETRICS 19', Phoenix, AZ

Balanced Allocation on Graphs with Random Walk Based Sampling 2018
56th Annual Allerton Conference on Communication, Control, and Computing, Monticello, IL (2018)

REFEREE WORK

IEEE/ACM Transactions on Networking (ToN)	2023
Dynamic Games and Applications (DGAA)	2023
IEEE Transactions on Automatic Control (IEEE-TAC)	2022, 2023
IEEE Control Systems Letters (L-CSS) / IEEE Conference on Decision and Control (CDC)	2021, 2023
Systems & Control Letters (SCL)	2022
SIAM Journal on Control and Optimization (SICON)	2022
IEEE Control Systems Letters (L-CSS) / American Control Conference (ACC)	2020

SKILLS

Programming: Python, Matlab, C++, Julia
Languages: Native Mandarin Chinese, Full Professional English, Elementary French

REFERENCE

Vijay Subramanian, Associate Professor,
Electrical and Computer Engineering Department, University of Michigan,
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