BOYAN DUAN

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EDUCATION

Carnegie Mellon University, Pittsburgh, USA   *September 2016 - June 2021 (expected)*
Ph.D. in Statistics
Department of Statistics & Data Science
University of Science and Technology of China, Hefei   *September 2012 - June 2016*
Bachelor of Statistics
School of the Gifted Young
University of Birmingham, UK   *June 2015 - August 2015*
Intern in Computer Science

RESEARCH INTERESTS

Human-in-the-loop interactive testing
Multiple testing, Nonparametric hypothesis testing, Martingale, Reproducibility in science and technology, Sequential experiments
Causal inference
Heterogeneous treatment effect, Subgroup identification

PAPERS AND SUBMISSIONS

Interactive Martingale Tests for the Global Null arXiv (EJS, 2020)
Boyan Duan, Aaditya Ramdas, Sivaraman Balakrishnan, Larry Wasserman

Presented in the International Conference on Multiple Comparison Procedures (MCP) in Dec., 2019.

Familywise error rate control by interactive unmasking arXiv (ICML, 2020)
Boyan Duan, Aaditya Ramdas, Larry Wasserman

Which Wilcoxon test should we use? An interactive rank test and other alternatives
arXiv (Biometrical Journal, Special Issue on Multiple Comparisons Procedures, revision)
Boyan Duan, Aaditya Ramdas, Larry Wasserman

Interactive identification of individuals with positive treatment effect while controlling false discoveries arXiv
Boyan Duan, Larry Wasserman, Aaditya Ramdas

TEACHING ASSISTANT

In-class tutorials, office hours, and grading for the following classes:
36-218 Probability Theory for Computer Scientists (Head TA)
36-708 Statistical Methods in Machine Learning (PhD Level Class)
36-705 Intermediate Statistics (PhD Level Class)
46-927 Statistical Machine Learning II
36-410 Introduction to Probability Modeling
36-401 Modern Regression
36-217 Probability Theory and Random Processes
36-225 Introduction to Probability Theory