

Yao Xie's Acceptance Speech for INFORMS Gaver Early Career Award

10/16/2022

It is my great pleasure to receive this distinguished award. I would like to first thank the award committee for their recommendation and Gaver's family for their generous gift. The award is a never-dream-come-true moment, a great honor, and a pleasant surprise. Thank you!

While I am luckily recognized for my work "at the interface of operations research, statistics, machine learning, and optimization," I realize that I have been viewing myself as an "immigrant" to the OR community. Indeed Having a Ph.D. in Electrical Engineering and a minor in mathematics, I do not feel I am doing OR "purposely" when developing statistical machine learning algorithms or working on Atlanta Police data. I have worked on many different problems and applications, and after reading the biography of Dr. Gaver, as a pioneer of "diverse research in OR," I feel the same spirit at heart.

In 2022, as data, machine learning, and artificial intelligence are transforming every aspect of our life, it is also changing OR. The field of OR has gone a long way from Gaver's time, but the spirit of research freedom and welcoming new immigrants remains. In my view, this spirit makes our community young after decades. I take this moment as an opportunity to highlight this spirit and pass it along.

Today, I would like to thank many people who have helped me along this journey. Thanks to my Ph.D. advisors, David Siegmund, who taught me statistics; Andrea Goldsmith, for teaching me information theory and how to capture the bare essence through complicated engineering problems. Thanks to my wonderful Georgia Tech colleagues: my chair, Edwin Romeijn, for his continuous support of my career, Jeff Wu, Jan Shi, Arkadi Nemirovski, Alexander Shapiro, and many others for the inspiration and fruitful collaborations. Thanks to my students for their hard work and being around. I am so glad to see my students grow rapidly; several of them have already started their academic careers. After becoming an advisor, I gradually learned that the fulfillment in this job is more than producing my own successes but also cultivating the next generation of minds. I feel this more today when receiving the Gaver award that passes the legacy from generation to generation. I want to say to my students that I am so proud of you.

Finally, I want to thank my family - the award is shared with you.