

18th

SHANNON MEMORIAL LECTURE

Wednesday, May 24, 2023
11AM -12PM: Lecture
12PM: Luncheon

Qualcomm Institute - Atkinson Hall
Calit2 Auditorium, UC San Diego
Zoom link: <https://ucsd.zoom.us/j/96930641828>
Meeting ID: 969 3064 1828



ALON ORLITSKY

Alon Orlitsky received B.Sc. degrees in Mathematics and Electrical Engineering from Ben Gurion University, and M.Sc. and Ph.D. degrees in Electrical Engineering from Stanford University. After a decade with the Communications Analysis Research Department at Bell Laboratories and a year at D.E. Shaw and Company, he joined the University of California San Diego, where he is currently a professor of Electrical and Computer Engineering and of Computer Science and Engineering and holds the Qualcomm Chair for Information Theory and its Applications. His research concerns information theory, statistical modeling, and machine learning, and focuses on fundamental limits and practical algorithms for extracting knowledge from data. Among other distinctions, Alon is a recipient of the 2021 Information Theory Society Claude E. Shannon Award and a co-recipient of the 2017 ICML Best Paper Honorable Mention Award, the 2015 NeurIPS Best Paper Award, the 2006 Information Theory Society Paper Award, and the 1992 IEEE W.R.G. Baker Award.

A B S T R A C T

Information, Compression, and Knowledge Extraction

Over the past two decades, our research group has applied information-theoretic principles, concepts, and techniques to diverse areas of machine learning and data science. This expository presentation follows our journey from compression, to estimation, structure exploitation, functional approximation, classification, and (time permitting) robust and reinforcement learning, with a few life lessons learned along the way.

