



Perturbation Data Science

Abstract



'Perturbation Data Science' refers to the development of data science methods and algorithms that leverage the effects of perturbations -- often unspecific -- within data. In this presentation, we will focus on a key aspect of this framework, exploring the links between invariance learning, robustness, and causality. We will highlight how these concepts have been applied to medical domain adaptation and discuss their potential, along with initial results, in drug combination discovery.



Peter Bühlmann

Professor
ETH Zürich

Peter Bühlmann is Professor of Mathematics and Statistics and Director of Foundations of Data Science at ETH Zürich. His research interests include high-dimensional statistics, causality, and interdisciplinary applications in biomedical sciences. He is a Fellow of the Institute of Mathematical Statistics (IMS) and served as IMS President in 2022-2023, a Fellow of the American Statistical Association, and he was Co-Editor of the Annals of Statistics 2010-2012. He received a Doctor Honoris Causa from the Université Catholique de Louvain in 2017, the Neyman Lectureship and Award 2018 and the Wald Lectureship and Award 2024 from the Institute of Mathematical Statistics, the Guy Medal in Silver 2018 from the Royal Statistical Society, and he is an elected Member of the German National Academy of Sciences Leopoldina since 2022.



WEDNESDAY
13 NOV 2024



TIME
03:00 PM



LT34

Blk S17 (3rd floor)
10 Lower Kent Ridge Rd
Singapore 119076