



ΠΑΝΕΠΙΣΤΗΜΙΟ ΠΕΙΡΑΙΩΣ

ΣΧΟΛΗ ΧΡΗΜΑΤΟΟΙΚΟΝΟΜΙΚΗΣ ΚΑΙ ΣΤΑΤΙΣΤΙΚΗΣ

ΤΜΗΜΑ ΣΤΑΤΙΣΤΙΚΗΣ ΚΑΙ ΑΣΦΑΛΙΣΤΙΚΗΣ ΕΠΙΣΤΗΜΗΣ

ΠΡΟΣΚΛΗΣΗ

Σας προσκαλούμε στην **ομιλία** του **Δρ. Βασιλείου Χασιώτη, Τμήμα Στατιστικής, Οικονομικό Πανεπιστήμιο Αθηνών** η οποία θα διεξαχθεί την **Παρασκευή 31 Μαΐου 2024, ώρα 16:00** στην **Αίθουσα 339** (3^{ος} όροφος, Κεντρικό Κτίριο), με θέμα:

Subdata selection for variable shrinkage in big data

Abstract/Περίληψη: In the field of big data analytics, the search for efficient subdata selection methods that enable robust statistical inferences with minimal computational resources is of high importance. A procedure prior to subdata selection could perform variable selection, as only a subset of a large number of variables is active. An approach when both the full data size and the number of variables are large is proposed. This approach first identifies the active variables by applying random Lasso, followed by subdata selection based on leverage scores to build a predictive model. The proposed approach outperforms CLASS, a method that already exists in the current literature, in both variable selection and prediction, while also exhibiting significant improvements in execution time. Simulation experiments as well as a real data application are provided.

Short Bio: Vasilis Chasiotis obtained his BSc, MSc and PhD from the Department of Mathematics at the Aristotle University of Thessaloniki in 2012, 2014 and 2018, respectively. Now he is a Postdoctoral Researcher in the Department of Statistics at the Athens University of Economics and Business. His research interests include experimental designs, subdata selection for big data analysis and small area estimation in survey analysis. His postdoctoral research focuses on the selection of optimal subdata for regression analysis in the context of big data, utilizing principles derived from optimal experimental designs. Over the past four years, he has also been actively involved in teaching undergraduate and postgraduate courses within the Department of Statistics at the Athens University of Economics and Business.