



Friday, October 10, 2025 8:00 am - 12:00 pm

EVENT SUMMARY

Join us on October 10, 2025, from 8:00 AM to 12:00 PM (CST) for our the American Statistical Association (ASA) Twin Cities Chapter Fall Traveling Course on Zoom. This practical workshop, led by Dr. Hemant Ishwaran and Dr. Min Lu of the University of Miami, emphasizes hands-on application and result interpretation of tree-based machine learning methods.

The event is co-sponsored by the ASA, the Twin Cities Chapter and the Institute for Research of Statistics and its Applications (IRSA) at the University of Minnesota.

- Course title: Tree-Based Machine Learning Methods for Prediction and Variable-Selection
- Instructors: Hemant Ishwaran, Professor of Biostatistics, University of Miami; Min Lu, Research Assistant Professor of Biostatistics, University of Miami
- Abstract: Tree-based machine learning methods offer several benefits in data analysis, including non-linearity, robustness, scalability and handling mixed data types. This course emphasizes practical learning with hands-on code examples and result interpretations, which is essential for understanding and applying these techniques. Based on the widely popular R package randomForesSRC, we will present methods for computing predicted outcomes, variable importance indices and other inference estimates. In addition, we will introduce a new model-independent variable selection method, called the rule-based variable priority, and present its implementation using the R package varPro. For all these analyses, we will cover different types of outcomes including continuous, categorical, multivariate, survival and competing risk outcomes. Utilizing real-world datasets from medicine and public health, topics in these analyses will provide hands-on code, working examples and result interpretations. We will provide additional code for visualizing model results and constructing coefficient tables for interpretation, and address scenarios such as imbalanced classes, unsupervised problems, fast implementation on big data and protection of confidential data
- Venue: Zoom. The Zoom information will be sent on the day before the course.

RSVP at z.umn.edu/ap5i by the end of Oct 7, 2025.

- Free for Student Members
- \$15 for Chapter Members
- \$25 for Non-Members (including one-year chapter membership)

