MGT417H5 PREDICTIVE ANALYTICS

WINTER 2022 | COURSE SPOTLIGHT

course description

This course introduces students to many of the algorithms and principles used in modern machine learning. Technical topics range from linear regression models and classification algorithms to random trees, support vector machines, and unsupervised learning. Issues of interpretation (inference and causality), and some broader implications of improvements in machine learning will also be discussed. The course will emphasize both conceptual understanding and technical application (to support said understanding). By the end of the course students will be comfortable formulating a question appropriate to machine learning, choosing and implementing an appropriate dataset and algorithm, and correctly interpreting results. Assignments and in-class exercises / demonstrations will be conducted using the open-source statistical and mathematical software R.

learning outcomes

After taking this course, students will have: (1) become familiar with fundamental machine learning concepts and algorithms; (2) gained practical experience of these algorithms using the R programming language; (3) addressed when and why various machine learning algorithms are and are not useful; (4) completed a capstone data prediction project to reinforce programming and conceptual skills.

testimonials

"Honestly, I have loved this course. It is by far my favourite course I'm taking. This statement is even coming after I had to learn R after being proficient in Python." - *UTMM Student*

"Great use of resources to support learning. Prof. Steck was also very helpful when clarifying concepts. Overall, this is a great course for anyone interested in getting an overview of machine learning." - *UTMM Student*

instructor

Professor Andrew Steck

Andrew is an Assistant Professor of Strategic Management at the University of Toronto, cross-appointed between the Department of Management at the University of Toronto Mississauga, and the Rotman School of Management. His research interests include industrial organization, the economics of innovation, energy economics, and applied microeconomics.

more info

Address

3359 Mississauga Road, Innovation Complex
Mississauga, ON L5L 1C6

Phone / Email

(905) 569-4565 / mgtadvisor@utoronto.ca

Website / Social Media

www.uoft.me/utmm / @utmmanagement