

THE SIAM STUDENT CHAPTER OF CITY TECH PRESENTS

On December 7th, 2023, in Room N719
FROM 1:00-2:00 PM.

Navigating the realm of online
advertising using Machine Learning

by Dr. Boris Iskra



Abstract: Our digital media platform specializes in performance-first, privacy-forward methods to execute programmatic digital advertising campaigns. In this landscape, imagine our focus on strategically placing ads for clients like a meal-kit company on cooking sites, creating a win-win scenario for both advertisers and users.

We delve into the intricacies of effective ad placement, envision a competitive marketplace where ad spots are up for grabs through bids with each webpage click. The challenge? Determining the optimal placement for our meal-kit company client, seeking to showcase its culinary delights through our platform.

Armed with valuable data such as webpage URLs, browser, os, ad size, and more. we use a diverse array of algorithms, including random-forest, linear regression, neural networks for predicting the prime ad placement for maximizing clicks. But beyond the algorithms, we shed light on the indispensable role of mathematicians who guide us in choosing the right strategy, infusing a human touch into the data-driven dance of successful ad placement.

In this talk we simplify the complexities, revealing how math, technology, and a commitment to performance-first, privacy-forward principles converge to find the sweet spot in the world of targeted advertising on our digital media platform—with a meal-kit company as a delectable example.

Bio: Dr. Boris Iskra embarked on his academic journey in Venezuela, earning undergraduate and master's degrees in mathematics from Universidad Simon Bolivar. He later pursued a Ph.D. in Mathematics at the University of Illinois at Urbana-Champaign, specializing in algebraic number theory.

Returning to Venezuela, Dr. Iskra became an associate professor at Universidad Simon Bolivar, making significant contributions to the field. Intrigued by computational aspects, he explored primality testing algorithms, earning the title of prime titan.

Driven by personal goals, Dr. Iskra pursued a master's in computer science at Oregon State University. After extensive training in machine learning, he joined AdTheorent as a senior data scientist, bringing his expertise to a vibrant team. Beyond academia, Dr. Iskra enjoys gaming with his son and embraces an eco-friendly commute, biking from North Jersey to Lower Manhattan.

Following his talk, students are invited to participate in a Q&A session focused on the intersection of mathematics and data science, providing insights into Dr. Iskra's journey and the dynamic landscape of pursuing a data science career as a mathematician.