

## **CSE FACULTY SEMINAR**

## Assistant Professor

Thursday, November 19 11:00am – 12:00pm Virtual (link in email)

## Bridging Continuous and Discrete Optimization through the Lens of Approximation

**ABSTRACT:** Mathematical optimization is a field that studies algorithms to find the element that maximizes or minimizes an objective function from a feasible set. While most interesting optimization problems are NP-hard and unlikely to admit efficient algorithms that find the exact optimal solution, many of them admit efficient "approximation algorithms" that find an approximate optimal solution. Continuous and discrete optimization are the two main branches of mathematical optimization that have been primarily studied in different contexts. In this talk, I will give a gentle introduction to the field(s) and briefly discuss my recent results that bridge some of important continuous and discrete optimization problems.

**BIO**: Euiwoong Lee has been an assistant professor at University of Michigan since September 2020. He got his

PhD from Carnegie Mellon University in 2017, and was a postdoc at New York University. His research interests lie in several topics of theoretical computer science including approximation algorithms and hardness of approximation.