

PhD research topic proposal (template)

BME, Doctoral School of Mathematics and Computer Science

Name and degree of supervisors : Edith Alice Kovács PhD

Are you willing to supervise Stipendium Hungaricum applicants?

No

Title of the topic: Contextual Stochastic Optimization

Short description:

Recent advances in machine learning and stochastic optimization have led to a shift toward contextual optimization, which uses covariates observed prior to decision-making. These stochastic optimization problems are relevant to various fields, including management science, transportation and logistics, manufacturing, and energy production.

The focus of this research is to introduce new methods for estimating contextual distributions for the contextual stochastic optimization problems and to apply these optimization methods to real-world data

The candidate is supposed to have some background in probability theory and optimization, furthermore, it is an advantage if the candidate has some machine learning knowledge. Also programming skills in R and/or Python are usefull.

Requirements:

Contact:

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Place of work:

Budapest University of Technology and Economics, Institute of Mathematics, H building.